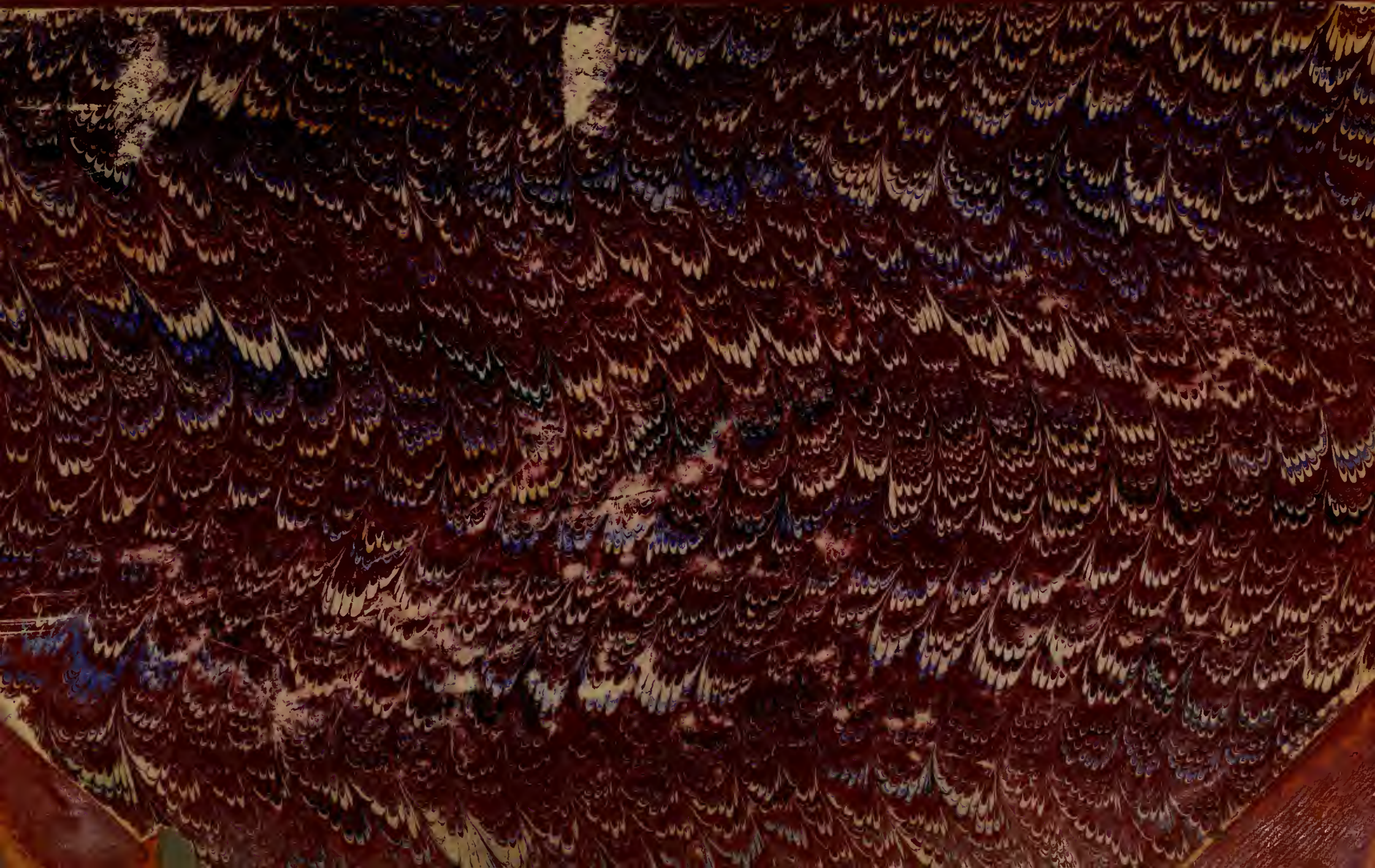

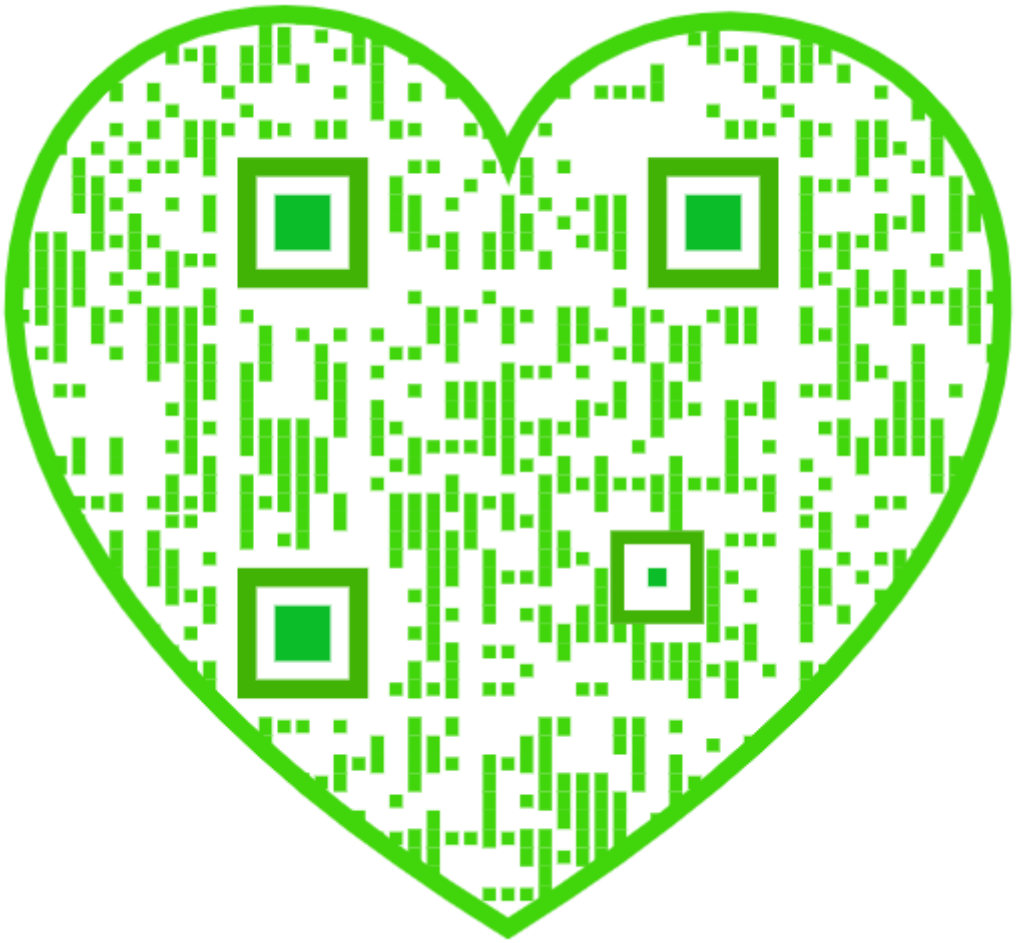

THE PACIFIC COAST ARCHITECT

A·MONTHLY·JOURNAL·FOR·THE ARCHITECTURAL · INTERESTS OF·THE·PACIFIC·COAST

OFFICE OF PUBLICATION
PORTLAND OREGON

·FIFTEEN·CENTS·A·COPY··DOLLAR·AND·A·HALF·A·YEAR·

VOLUME 1 APRIL, 1911 NUMBER 1

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VOLUME 1 — PORTLAND, OREGON, APRIL 1911 — NUMBER 1

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The Editor will be pleased to consider contributions of interest to the readers of this publication. When payment for same is desired this fact should be stated. Self addressed envelopes must accompany all such contributions.

ADVERTISING RATES ON APPLICATION — TELEPHONE MAIN 5121

FOREWORD

The announcement of the birth of a new publication is, quite naturally, received with a considerable degree of interest in any community. The interest and good wishes for the success of the PACIFIC COAST ARCHITECT have quite overwhelmed the publishers and we wish to express our thanks to our many friends.

Precedent has placed upon our shoulders the obligation to tell you, in this first issue, something of our hopes and aims for the magazine. However, though we might use much space and take much of your time, we vastly prefer to have the coming issues speak for us.

Tersely, we believe there is an unoccupied field for a high class architectural publication representing the Pacific Coast. We believe the PACIFIC COAST ARCHITECT will fill that void. The journal will be conducted along the broadest reciprocal lines consistent with good business policy. We shall show only the best examples of the craft, constructed along the Coast. The subscription price is within the reach of all who appreciate a good publication of its kind and an effort will be made to interest the layman as well as the craftsman.

We commend this issue to your consideration with the assurance that your criticisms and suggestions will at all times be gratefully received. How do you like the first issue of the PACIFIC COAST ARCHITECT?

The Builders Exchange, a much needed organization

As we are about to go to press strenuous efforts are being made for the organization of a builders' exchange and, we hope, by the time this issue reaches you the organization will have been completed by the adoption of a constitution and by-laws.

According to the sponsors of the new organization, its purpose will be the elimination of dishonest contractors and the elevation of the building industry to a legitimate basis. The exchange will be patterned after that in Frisco and it is planned to have regular club rooms which will appeal to the social as well as the business side.

There is no question but that an organization of this kind would prove of inestimable value not only to the local but as well to the building interests of the entire State. It is only through an organization of this kind that the evident abuses from which the trade suffers can be promptly and efficiently eliminated.

With the architects, the contractors and the material supply men in a concrete organization there will be no more "abuses." The following committee of twelve have the completion of the organization in charge:

Fred W. Wagner, representing the tilesetters and dealers; Andrew Freiberg, master masons; Thomas Muir, master carpenters; J. Reudy, master plumbers; G. Weaverson, master sheet and metalworkers; J. O'Hara, master plasterers; A. W. Parks, master electricians; E. E. Gilmer and R. A. Hume, dealers in building supplies; E. C. Comstock, master ornamental ironworkers; M. J. Walsh, dealer in lights and fixtures, and L. F. Danforth, master painters.

Homes Built "While You Wait"

According to an English publication, the cry of "back to the land" is being as persistently voiced "across the pond" as in our own country. The problem which has been of most importance is the suitable housing accommodations at a cost low enough to permit the rentals being fixed at a figure in ratio with the earnings of the tenants.

At an exhibition to be held in the Royal Agricultural Hall next month a development association will exhibit a model cottage which will prove of unique interest and which, it is said, will mark the commencement of a new era in the planning and erection of small residences.

The cottage consists of a steel frame, with concrete walls, and differs from some recent attempts made in that it is most artistically designed by E. C. P. Monson, F. R. S., a well-known English architect.

Arrangements are in hand for having a series of such cottage practically built in the factory, and transported to any part of the country in sectional parts. The designs and all fittings can be standardized and supplied

in large quantities, and it will be readily understood that the cost of production will be thereby considerably cheapened.

The new method of construction will be found in every way far superior to the ordinary style of brick building, inasmuch as the cottages will be damp, fire, and vermin proof, and certainly far more sanitary, seeing that there will be no useless cavities in which bad air may congregate, or disease germs infest.

Although only seven days will be allowed for erection the cottage will in that short space of time be erected, finished and furnished complete, ready for habitation, in every way as if intended for permanent occupation, and it will certainly form one of the chief attractions of the exhibition.

A State Architect

Oregon now has a "State Architect," who has been appointed by the State Board to take charge of the construction of public buildings. W. C. Knighton, of Portland, has been chosen for the position.

Under the new system the State Architect will receive a salary of $4500 a year and will have charge of all the architectural work. He will devote his entire time to the work for the State and it is understood will take up his new office immediately.

According to estimates of State Treasurer Kay, if the State should hire an architect on the old basis to do the work of preparing plans and to supervise the construction of the proposed building for the Eastern Oregon Branch Insane Hospital, at Pendleton, the services for that work would cost the State $20,000. If the architect had to prepare only the plans the cost would be $12,000.

In consequence, the board sees an opportunity for an enormous saving in this one item alone, aside from the buildings that are to be constructed at the State School for the Feeble-Minded, the Reform School, the State Capitol addition and other public work of this nature.

Lighting Helps

The frequent blackening which occurs on gas mantles of the Welsbach type can oftentimes be corrected by the use of common table salt. Turn the light low and sprinkle lightly from a salt-shaker. Then let the light burn brightly for a few minutes and much of the black will have disappeared. Repeat this process until the surface is entirely clear. If the brass of the burner is visible clean off all salt grains, as they have a corrosive action and are apt to stain. This simple remedy can make a considerable saving in mantles.

The Palladium, the new music hall, built on the site of the old Hengler's circus in London, is said to be a wonderful place of its kind. Its stalls alone will seat nearly 1300. Its palm court will give tea to a thousand at once. It has a larger Royal box than any in London, a postoffice on the premises, writing rooms and tape machines. It has a Louis Quinze salon with a ceiling that "almost exactly resembles porcelain."

Careful inspection is necessary while stucco work is in progress, says a writer in the Architects' and Builders' Magazine, to see that the wire or metal lath is properly fastened and that the stucco is properly mixed of good ingredients and is applied in sufficient thickness. Usually two-coat work totals in thickness not much over one-half inch. This runs close to the limit of safety and a one-inch coating is sure to be far more satisfactory, lasting and durable. The writer calls to mind a house on Long Island where the wire lath was fastened directly to the studding and a stucco rich in cement troweled on to a thickness of about one inch on the face squeezed through to the back, forming a bond about one-quarter inch in thickness. This house has stood for years. The walls are uncracked, because the foundations were good, and the house has always been dry inside and easily heated in winter.

The curved bridges of Japan are of three kinds—first, those known as spectacle bridges, with an arch in the center suggesting a pair of spectacles; second, the camel back bridges, which go up very high indeed; third, the ordinary one arch, semi-circular bridges. The reason the Japanese so often have curved bridges is because until modern times they could not build them flat, and even today there is no keystone to the Japanese arches. A great many of two classes of bridges—the camel back and the high curved bridges—are found in the palace grounds at Pekin, in China.

A new method of drying humid walls, says the *Slate Trade Gazette*, has been devised by a Belgian architect. It consists in embedding inclined porous tubes in the walls, the direction of the tubes in plan being perpendicular to the wall surfaces. By capillary action these tubes continually absorb moisture from the wall, for the air which they contain, being in the same hygrometric condition as that of the interior of the building, is relatively dry, and readily takes up the moisture. The act of vaporizing ensuing therefore reduces the temperature of the air passing from the tube and being constantly replaced by dryer and warmer air. The tubes are placed sufficiently close together to leave no intervals between their zones of influence. In new buildings the places for the tubes are left, but the tubes themselves are not inserted until the mortar has set. It is stated that the method has been tried at Versailles.

Organization is now being perfected for the Ninth International Congress of Architects to be held at Rome next year in connection with the Jubilee Exhibition. Among questions to come up for discussion will be: (1) Armored cement, as used in various countries, and the possibilities of its being utilized for large buildings of a monumental character, having due regard to the technical and decorative aspects of the question. (2) Rules governing international competitions in architecture. (3) Regulations and plans relating to buildings and artistic considerations in towns. (4) Professional instruction and diplomas for architects. (5) Duties and privileges of architects in relation to their clients. (6) Practice of architects of various nationalities.

Some Local Tendencies in the Furnishing of Homes

BY BERNARD C. JAKWAY.

Popular interest in the home and its furnishings has increased enormously during the past few years, doubtless as a result of the general desire for a fuller comelier mode of living which is everywhere manifest. It has come to be recognized that a tastefully and comfortably furnished home is the essential element in any scheme of well-ordered living. Experience, moreover, has shown that such houses do not merely happen, rather that special knowledge and educated taste are required in this creation. Hence the remarkable interest in interior decoration, which is the sum of all those processes by which a house is made beautiful and comfortable.

This fascinating subject has been much exploited. Many books upon it are published yearly, magazines are devoted to it, women's clubs discuss it, manufacturers and dealers keep it constantly in print. As a result of all this publicity the general taste has become more discriminating. Better designers are demanded in housefurnishing and more harmonious colorings. Styles formerly popular are no longer acceptable, once cherished household goods are consigned to the auction house or the poor relative.

In this brief summary of local practice and tendencies none but medium-priced houses—those costing from $2000 to $8000—are considered. It is among the owners of such houses that the increasing interest in artistic home furnishings is chiefly notable and significant.

The most obvious characteristic of a properly furnished home is simplicity, and it is in this direction that the improvement in taste has been marked. The enormous local popularity of the Mission and Craftsman style in furniture and decoration is due to their simplicity. Mission furniture, though crude and heavy, is dignified and wholly free from tawdry ornament. Craftsman, Quaint or Arts and Crafts furniture, as it is variously called, is somewhat lighter and more graceful, but almost equally severe. Its perfect simplicity of design and staunch construction make it the highest expression of the reaction against the pretentious designs, the weak curves, meaningless ornament and poor cabinet-making of the popular furniture it has so largely displaced. Quaint furniture is made of oak, usually of a nut-brown color, and harmonizes well with the stained fir in which our medium priced houses are usually finished. Such a house, when well designed, is very attractive with its plain tinted walls, beamed ceilings, paneled dining room and dignified straight-line furniture.

However, there is small doubt that the style has passed the zenith of its popularity. Thousands of just such houses have been built and furnished in Portland during the last few years. A stone thrown from any corner in our newer residence districts would be fairly sure to hit one. In this endless duplication simplicity has become monotony. We are apparently at a point where something is demanded that will conserve what has been gained in simplicity and dignity while permitting the development of a larger degree of individuality.

One present tendency in this direction is to use wall papers increasingly instead of tinted walls. Good papers are now obtainable in a variety of artistic designs and colorings undreamed of a few years ago. Portland is far behind most other cities in its appreciation of this admirable decorative material. Its growing popularity here promises much for the attractiveness and distinction of our homes.

Another tendency is to relieve the severity of the monotonously straight lines by using oak furniture based on the old Flemish and English designs. This furniture has all the strength and dignity of the Craftsman style, but is softened and embellished by a little turning, carving or cane. It is somewhat archaic in appearance, but the pieces are often beautiful and give a fine air of individuality to a room.

The best present practice, and the one most likely to become popular in the future for houses finished in fir, it to use with the tables, desks and bookcases of the quaint or Flanders styles a few simple upholstered pieces, or willow chairs with chintz or tapestry cushions, thus adding comfort, color and individuality, while preserving simplicity and restfulness.

When the architects of this sort of houses meet the furnisher half-way; when they reduce to proper width the openings which so often yawn between adjoining rooms, occasionally substitute simple cornices for the interminable beamed ceilings and eliminate the ill-conceived sideboards that too frequently disfigure their dining rooms the end of the reign of monotony will be in sight.

Painted and enameled woodwork in white, ivory or gray, will be used very much more frequently than at present in the living rooms, dining rooms and halls of medium-priced houses. This will offer a very agreeable variation from stained fir, moreover painted woodwork harmonizes with almost any wall treatment and offers the widest latitude in the choice of furniture. It is sure to extend greatly the use of mahogany furniture which is now barred from many by its lack of harmony with the woodwork. In this connection it is interesting to note that several large makers of popular priced furniture are preparing to bring out lines of solid mahogany that will cost no more than good oak. This furniture will be very simple in design, inclining in style to the Craftsman or modern European types. It will be interesting and handsome, and seems assured of a wide popularity.

In conclusion, it seems safe to say that for the better class of houses here the vogue of the Colonial is about to pass, although the intrinsic merits of the style will always ensure its popularity. The tendency is toward the reproduction of the pure eighteenth century English furniture—notably the best pieces of Chippendale, the Adams Brothers, Hepplewhite and Sheraton. The charming air of distinction and the rare beauty of line and ornament possessed by these pieces commend them to the most exacting taste, while the historic interest which attached to them in no way impairs their adaptability for common use in the homes of today. It is to be hoped that architects will elect to do more work in the Georgian style and that they will urge upon their clients its delightful qualities of beauty, variety, simplicity and repose.

Girderless Floor Design

BY VICTOR S. PERSONS.

Girderless ceilings realize the ideal construction for buildings requiring simplicity and strength as well as artistic effect, and require only a fairly regular system of column spacing. They are equally adapted to hotels, apartment houses, factories, warehouses and to all other buildings covering large ground area.

This type of construction saves at least 10 per cent of the total building height—wherever an unbroken ceiling line is required—by avoiding the furring under the beams and the consequent loss of head room; it gives a most attractive interior, and provides a 50 per cent increase in the intensity of lighting in the interior of the building; it is fireproof; it affords an economy of design and rapidity of construction impossible to any other type of building; usually it reduces the cost of the structural portion of the building by at least 20 per cent.

The unquestioned advantages of girderless slab floors have inspired many ingenious designs which dispense with beams without loss of structural efficiency. At least two of these designs have established themselves permanently.

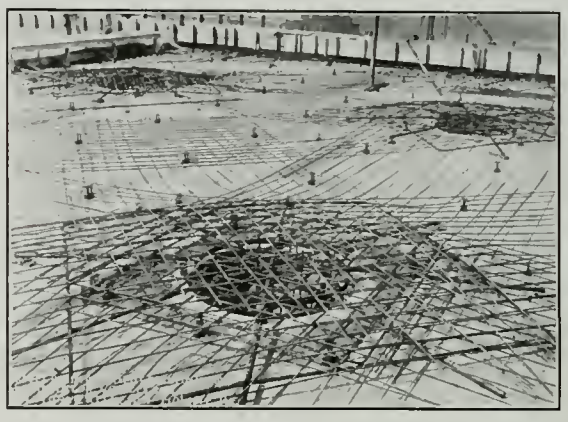
Square floor panels with two-way reinforcement, supported by broad flat beams extending normally between columns, effected the required saving in head room without departing from the accepted beam and girder method of design, but are not economical. The mushroom design with reinforcement radiating in eight directions from the supporting columns proved very satisfactory, structurally, but at first defied mathematical analysis of the stresses in the materials.

As this latter type of design established itself permanently, mathematical theories for its justification became absolutely essential and as these theories could not be deduced from any existing data, actual laboratory tests upon the completed building under full loads and excessive loads were required to provide basic facts for new

ARTISTIC INTERIOR OBTAINED BY THE UNBROKEN CEILING LINE

formulas. Tests of this character extending over several days during November, 1910, were made upon the Deere and Webber building in Minneapolis, Minn., by the Experiment Station of the University of Illinois under the direct charge of Professor A. N. Talbot. The partial results of these tests were published by all of the engineering periodicals during the months of December or January past and are too well known to require repetition here.

Eight adjoining panels were tested under full load and under about 50 per cent overload by the most careful and thorough methods known to laboratory practice today. Distortions of the materials were measured accurately to the minutest fraction of an inch and the stresses which gave rise to these distortions were then determined.



CORRECT ARRANGEMENT OF SLAB STEEL THIS PREVENTS CRACKS AROUND THE COLUMN HEAD

No such tests have ever been made on any other type of reinforced concrete construction; consequently, the stresses existing in materials used in flat slab construction of cantilever design are more definitely determined than the corresponding stresses in any other type of structure.

Besides determining definitely and completely the nature and amount of the stresses in materials, these tests proved conclusively that the stresses in the center of the panel under full load reach their maximum when one panel only is loaded and the minimum when all adjacent panels are loaded; that these maximum stresses are less than one-half the least values allowed by the best engineering practice; that the stresses in both the steel and the concrete are a maximum at the column head and that they attain their greatest values when the entire floor is loaded; that these stresses under full load and proper design will not exceed the most conservative values permitted in beam and girder construction; that a correct design requires the proper distribution of the slab steel between the diagonal and rectangular bands; also cracks which sometimes occur around the column head are in all probability due to an unbalanced distribution of the slab steel (that is, the width of either the diagonal band or the rectangular band is not correct and the spacing of the bars in these bands is out of proportion); that the beam and girder system of analysis is entirely inadequate for flat slab design, as the stresses determined by experiment are far less and do not correspond to those determined by this method of analysis.

The two most valuable results of these tests were the definite determination, (1) that flat slabs of cantilever type can be designed as accurately as any system of beams and girders, if not more so; (2) that the value of any flat slab design depends equally upon the sufficiency and the correct distribution of the steel about the column head

(Continued on Page 31)

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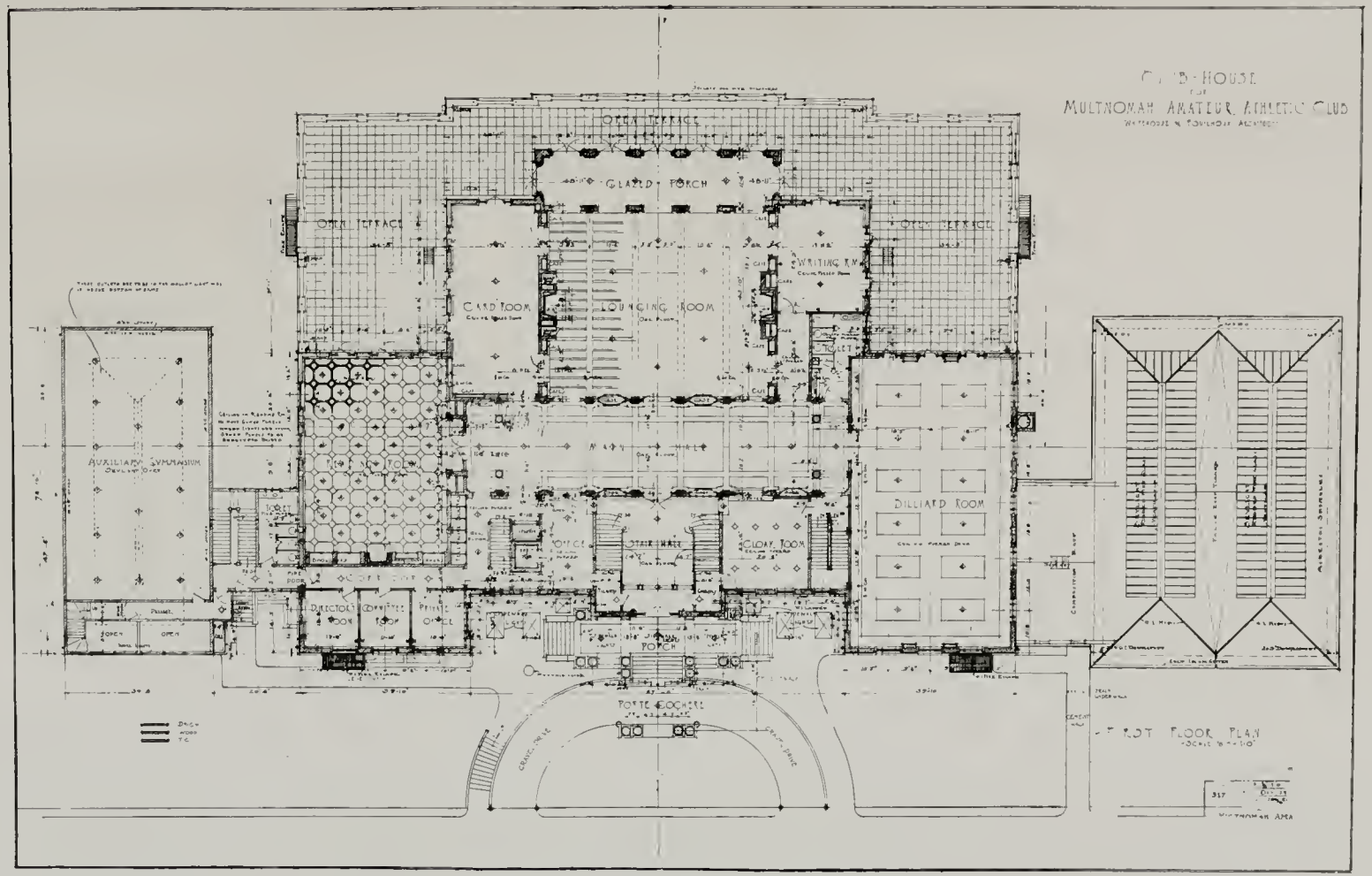
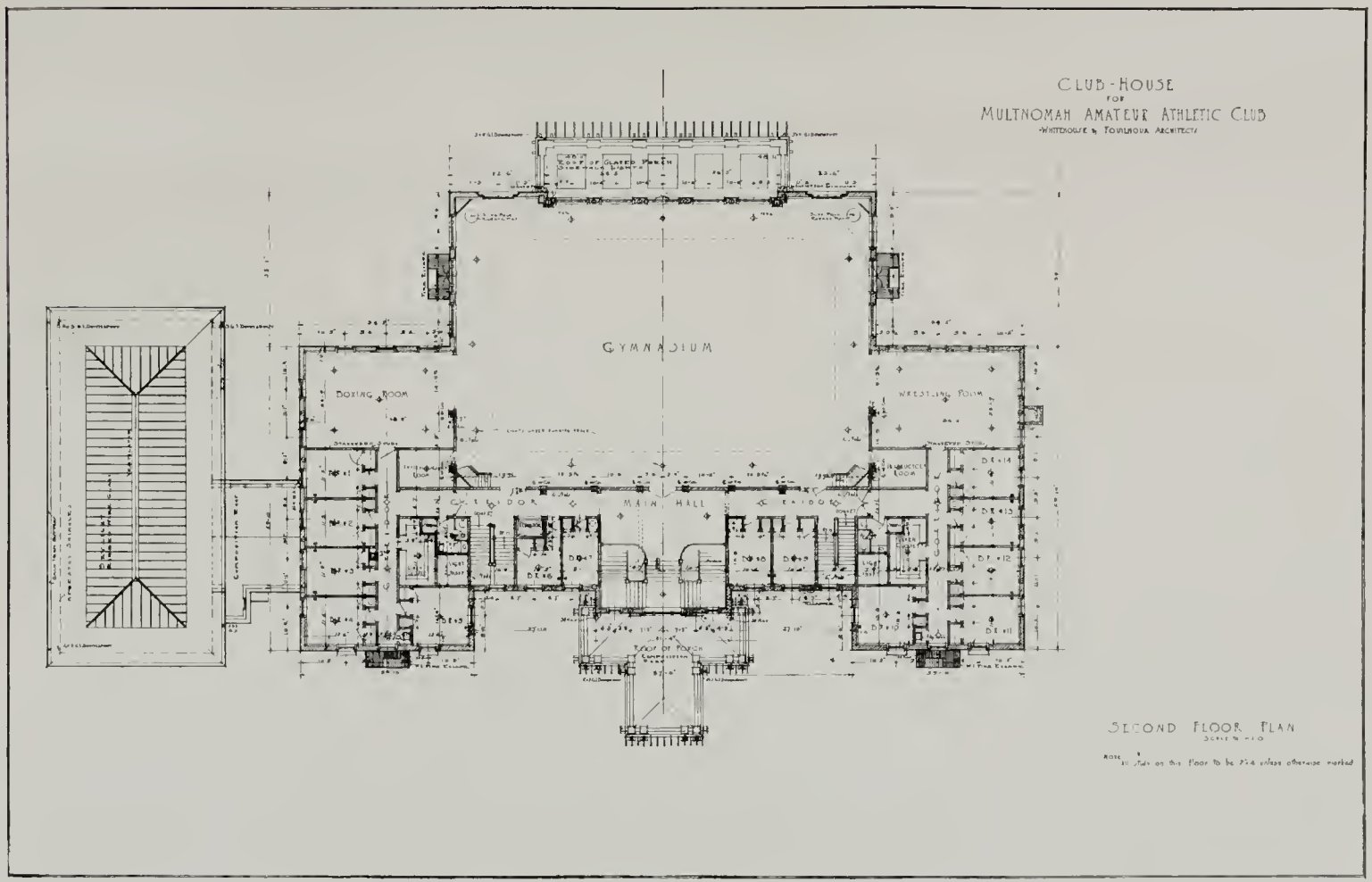
Club House, Multnomah Amateur Athletic Club, Portland, Oregon
Whitehouse & Fouilhoux, Architects



PACIFIC COAST ARCHITECT
APRIL, 1911

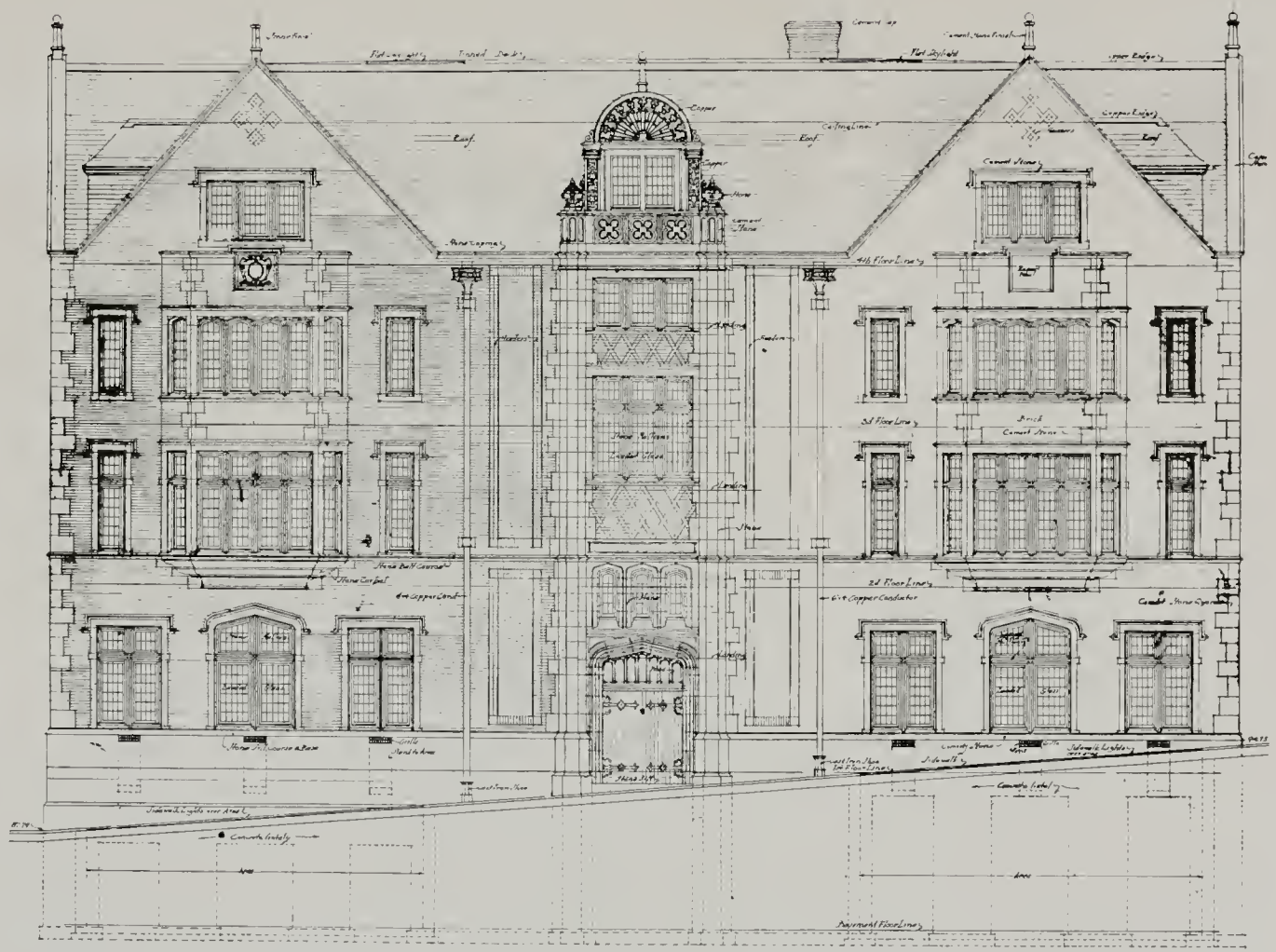
First Floor Plan, Club House, Multnomah Amateur Athletic Club
Whitehouse & Fouilhoux, Architects



PACIFIC COAST ARCHITECT
APRIL, 1911

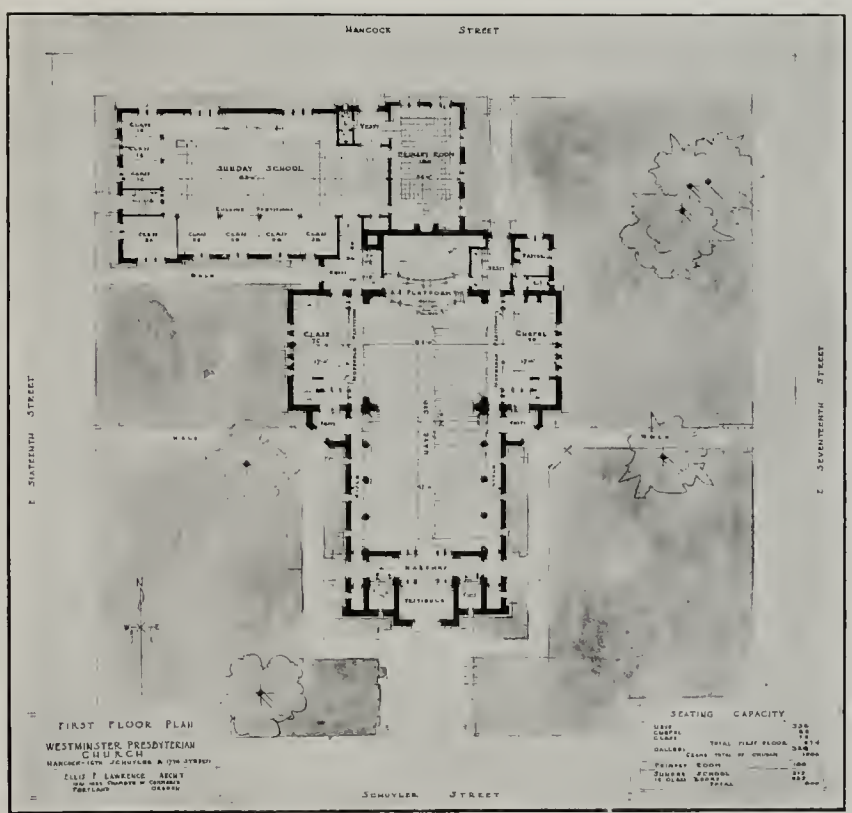
Second Floor Plan, Club House, Multnomah Amateur Athletic Club
Whitehouse & Fouilhoux, Architects

Parish House, First Presbyterian Church, Portland, Oregon
Doyle, Patterson & Beach, Architects



PACIFIC COAST ARCHITECT
APRIL, 1911

Detail, Parish House, First Presbyterian Church, Portland, Oregon
Doyle, Patterson & Beach, Architects



Westminster Presbyterian Church, Portland, Oregon
Ellis F Lawrence, Architect

PACIFIC COAST ARCHITECT
APRIL, 1911

PACIFIC COAST ARCHITECT
APRIL, 1911

Residence, Hill Crest Drive, Portland, Oregon
Ellis F. Lawrence, Architect

Residence, Dr. Stephen B. L. Penrose, Lake Bay, Washington
Ellis F. Lawrence, Architect

Residence, Dr. Clarence Nichols, Oswego, Oregon
Ellis F. Lawrence, Architect

Residence for Mr. J. R. Bowles, Portland, Oregon
Emil Schacht & Son, Architects

PACIFIC COAST ARCHITECT
APRIL, 1911

Preliminary Sketch for a Portland Mansion
Birnbach & Mayer, Architects

Girderless Floor Design

(Continued from Page 10)

and that without this correct distribution, cracks may appear in the concrete, which are extremely unsightly, although not necessarily dangerous.

Several of the largest interests in the country have adopted this type of design wherever practicable in all of their recent buildings. Packingtown in Chicago is being practically rebuilt with such structures. The Quaker Oats Company is building on these lines in all parts of this country and in Canada. The John Deere Plow Company and other large houses dealing in agricultural implements use this type of construction almost exclusively. The number of buildings erected along these lines increases practically 100 per cent every year, and every indication warrants the statement that within five years flat slabs of cantilever design will be generally accepted for all fireproof buildings to which they are in any way adapted.

Duquesne Comes to Harvard

The announcement that Duquesne, former holder of the Grand Prix de Rome, has been secured by the architectural department of Harvard University is cause for congratulation. The position has been accepted as a permanent one and the already strong department has thus been augmented by some of the best talent that the old world with the most modern of new ideas can afford. The architectural department at Harvard has made strides in the past that bid fair to make it the cynosure of every other institution in the country. The engagement of Duquesne will probably be followed by other universities securing similar men for their departments. When the architectural college at the University of Minnesota gets well under way it may be possible to secure just such a man to head its endeavors. Already the Harvard architectural department under Prof. H. Langford Warren has shown rare excellence. Its qualifications for admission are placed high. College degrees must be shown before admission to the school can be obtained. This is true of all the professional colleges at this university, and as the West is taking the same course in the colleges of medicine and law, it may be wise even at this early date to look to Harvard as an example in this regard. The West may well look to her laurels in the architectural field. Unless the Western universities have similar educational riches to offer, the already increasing flow of architectural students from the West to the East may take away prestige that might be an early possibility in such institutions as we now have.

Invents Vertical Filing Device for Plans

Dean Francis C. Shenehon, of the College of Engineering at the State University, Minneapolis, has applied for a patent for a new device which he calls the arc system of vertical filing. Dean Shenehon devised the new system while a member of the engineering staff of the Great Lakes survey, where thousands of these charts are filed. When laid flat in drawers the charts are inaccessible and are in constant danger of being torn. Under the new system the charts are placed in large swede-rope envelopes and put in the filing case in vertical form. The encasements are curved slightly, so that charts and drawings stand by their own weight. It is on this curved theory the invention is founded and on which Dean Shenehon has applied for a patent.

Portland Cement Production in 1910

The Portland cement production in the United States in the year 1910, according to the preliminary estimate made by E. F. Burchard, of the United States Geological Survey, has set a new high record. His preliminary estimate is based on statistics and estimates received by the Survey from 20 per cent of the companies manufacturing Portland cement, these companies representing nearly half of the entire output of the country. From these figures he concludes that the production in 1910 was between 73,500,000 and 75,000,000 barrels, as compared with 63,508,470 barrels produced in 1909. This is an increase of 10,000,000 to 12,500,000 barrels or 15 to 20 per cent. The figures on which this estimate is based have been received from manufacturers in all parts of the United States, and are therefore considered to be representative of the country at large rather than of any single section or district. Although the average values for 1910 appear, from returns received thus far, to have been slightly higher than in 1909, prices were far from satisfactory, especially to the large manufacturers in the Lehigh Valley district and in certain of the Eastern States. The year 1911 opens with prices cut 5 to 10 cents a barrel lower than those prevailing in 1910. The construction of several new plants has been pushed during the year, and several plants that were under construction in 1909 became producers in 1910, so that the kiln capacity remains far in advance of the demand.

Ten Best Buildings Named; All are in the East, Say Architects in Voting Contest

Which are the ten most beautiful buildings in the United States? A great voting contest in the East, of architects and architectural students, gave this list: The Capitol and the Congressional Library in Washington; the Public Library and Trinity Church in Boston; Columbia Library, Trinity Church, St. Patrick's Cathedral, the City Hall and Madison Square Garden, in New York, and the Vanderbilt residence, Biltmore, in North Carolina.

All of these buildings are in the East. Three of them are libraries and three are churches. One capitol, one city hall, one place of amusement and one residence complete the list. Not a single State capitol or theater or gallery of art or monumental museum has a place.

It is hardly likely that the vote taken in the contest was fully representative of the country, says the *American Carpenter and Builder*. It is an Eastern judgment, expressed by architects, and the favor appears to have run to grandiose rather than to beautiful buildings. A Western vote or a vote of artists or of amateurs would doubtless have given a different verdict in several cases.

Bombay and Calcutta, according to a dispatch from the latter city, are about to be rebuilt on a colossal scale by the British Colonial Government, in order to rid those ancient communities of the danger from plague which for years has proven such a menace to civilization. The scheme of improvements includes miles of new roads to run through the congested districts and the establishing of parks and up-to-date tenement houses. Trolley lines are also to be built and sewers and other sanitary advantages as well are to be provided. The cost of rebuilding the two cities will be approximately $53,000,000, or about $26,000,000 in either case.

Damp-Proofing

BY R. A. ELDRIDGE.

Not many years have passed since owners who were erecting brick or concrete buildings considered the matter of damp-proofing the walls of these buildings as unnecessary expense. Great strides have been made in building in the last few years, and architects and contractors have given much thought to ways of improving the usefulness of buildings, the need of damp-proofing, especially in a country where there is so much moisture at certain seasons of the year, is being emphasized more and more as the number of brick and concrete structures increase. Many different methods of accomplishing this have been tried. After much experimenting, some of it very costly, as is usual in such cases, it has been found that the best result is obtained by applying a liquid coating directly to the walls of the building either on the inside or outside. As it is often difficult to apply this to the outside walls, it has become the general practice to apply it on the inside, and from the standpoint of economy this will be shown later to be the proper place to apply it. When properly prepared this liquid will remain "tacky" and plaster can be applied directly to it and will hold without the aid of "furring." This, of course, is optional with the builder, and if desired, lath can be nailed over it and the plaster applied as usual, but this is an unnecessary expense.

The first question brought up by the prospective builder is naturally the one of expense. At first glance, and without going into the matter thoroughly, it may appear that the cost of properly damp-proofing a building would be a large item. That this is a mistake can be readily seen after a few minutes work with a pencil. Then again the item of initial cost is not the only thing to consider, as the question of repairs is a point that should have careful attention in figuring cost. We thus see that there are two questions which should be considered, and we will first take up the initial cost. As stated above, the best damp-proofing comes in the form of a liquid of about the consistency of ordinary paint, and this is applied directly on the walls. This paint can be purchased at a moderate price per gallon, and can be applied to the walls by any ordinary workman. Rough surfaces will, of course, require more paint than smooth ones, but the average cost of damp-proofing will run from 12 cents to 15 cents per square yard. To offset this expense we can save the cost of "furring," as the plaster can be applied directly on the liquid, where it will be held in place as satisfactorily as if lath were used.

We now come to the question of repairs and other damage. All bricks are more or less porous and will absorb water readily, and cement will act the same way, no matter how it is treated. When water enters the walls of a building it will naturally follow the course of least resistance, and as more water is being absorbed from the outside this would naturally be towards the inside wall. It will make itself visible in various ways, sometimes in water stains showing through the plaster, and again by causing the plaster in certain parts of the rooms to fall off entirely. The writer had occasion recently to see an extreme case of this kind in a modern flat building where the owner had thought damp-proofing unnecessary. In the rooms on the more exposed sides of the building, the water had seeped through the bricks, which in this case were covered by a coating of cement and plaster, and had caused the interior plaster to peel off in large patches in every room. In the rooms occupying the less exposed part of the building, the water had seeped through in the form of stains, which had ruined the tinting in almost every room. As a natural consequence, the tenants occupying the rooms where the plaster had peeled, had moved, after collecting from the landlord for rugs, furniture, etc., damaged by the falling plaster and the rooms were still empty. At considerable expense the walls were damp-proofed, and the rooms put in shape again, whereas if this had been properly done in the beginning there would have been no trouble, and the expense would have been only about one-half what it finally amounted to. I feel sure that almost every architect of experience has seen cases very similar, and which would never have happened if damp-proofing had been used.

Another feature in favor of damp-proofing, and one which as a rule is not given much consideration, is the protection it affords from vermin which is almost always found where a building has not been damp-proofed. As the interior plaster is applied directly on the damp-proofing without the use of lath, one can readily see there is no room for the "undesirable citizens" that generally make this part of a building their rendezvous. Small insects can not bore through this layer of damp-proofing, for when properly prepared it is deadly poison to them. The liquid should also be alkali and acid proof.

So far we have spoken only of damp-proofing the walls above the foundation, and we will now take up water-proofing the foundation of the building. This is accomplished by a different method altogether, as below the ground there is always a certain amount of water pressure to contend with.

For a great many years it was the custom to use layers of felt mopped with asphaltum for this purpose, and this is still done to some extent. The main objection to this system is the liability of the paper to tear if the concrete should expand or settle. If this takes place and the felt is torn even a little, a leak is sure to follow, and it is very hard to locate the exact position of this leak. The water may seep through the torn felt and follow along until it reaches a weak place in the cement and then break through, several feet from where the leak really is. For this reason it is often found necessary to again water-proof a large part of the basement to be sure the leak is covered securely. The system which is recommended now by most of the leading architects and one that is largely followed where known, is not only less expensive, but does away with any such trouble. A specially prepared water-proof pitch is used, which is treated with the view of making it very elastic. This is melted to a liquid consistency and applied direct to the walls and floor with a brush, but a much heavier coat is applied than in the case of the damp-proof paint. Where a heavy pressure has to be met this coat should be at least one-fourth of an inch thick, and where only a small pressure is found it need only be applied about one-eighth of an inch thick. Directly over this coat there is applied a facing coat of cement from one-half to one inch in thickness, depending on the pressure. The pitch will form a binder with this cement and hold it firmly in place, and being made very elastic will expand or settle with the foundation, making a leak almost impossible where it has been properly applied. If the foundation walls are easily accessible from the outside it is sometimes advisa-

ble to cover these walls with a heavy coat of damp-proof paint, also; however, this is not essential, but will give additional protection. This same water-proof pitch can be used for making stable floors or for insulating cold storage plants. As the pitch is made acid and alkali proof its use is very effective in stable floors. In swimming pools, it is applied the same as on foundation walls, and if desired the facing coat of cement can be covered with tiling to add to the beauty of the pool.

Looked at from the standpoint of initial cost, it will be seen that damp-proofing is not any more expensive than the other construction necessary where it is not used, and viewed from the cost of repairs and damage that may follow where it is not used it is found that the cheapest and best way to erect a building is to use damp-proofing. Incidentally, the feeling of personal satisfaction in knowing that your building is absolutely water and vermin proof, while not measured in dollars and cents is something worth considering.

Portland Architectural Club

At the meeting of the Portland Architectural Club, Tuesday evening, March 7th, Mr. Lazarus gave a very interesting talk on his recent trip through Europe. A number of slides were shown illustrating the various points of interest which he visited.

The club is looking for new quarters. Room with good light is needed for the Atelier and also a library and lounging room. If such quarters can be found the club will decorate them and install comfortable furnishings.

A committee from the club is acting with committees from various contractors' organizations relative to the establishment of a builders' exchange.

The Atelier is still at work, eight men having sent in the last esquisse, which was a "Town Hall" for the Class B project and a "Peristyle with Porch and Portico" for the Class B analytic. The mentions for the last competition follows:

Judgment of February 20, 1911.

Archæology.

Stanley Flawn, mention. S. F. A. C. Atelier Brown.

Plan Problem.

Michelson. S. F. A. C. Atelier Brown.
Joe S. Gould. S. F. A. C. Atelier Brown.
C. I. Harrison, mention. S. F. A. C. Atelier Brown.
Carl I. Warnecks, mention. S. F. A. C. Atelier Brown.
W. G. Hathaway. Portland A. C.
Louis C. Rosenberg. Portland A. C.
T. Bearwald, mention. S. F. A. C. Atelier Kelham.
J. W. Bagley, mention. S. F. A. C. Atelier Kelham.
Thos. Bendell. S. F. A. C. Atelier Kelham.

Order Problem.

Geo. Williams. Atelier Hays.
Frank Bastain, mention. Atelier Hays.
Wm. J. Wilkinson. Atelier Hays.
Edwin E. Merrill. Portland A. C.
Chas. K. Green, mention. Portland A. C.
Barton E. Brooks, mention. Portland A. C.
Russell E. Collins. Portland A. C.
Angelo Hewetson, mention. S. F. A. C. Atelier Brown.
Schroeder, mention. S. F. A. C. Atelier Brown.
Stanley C. Flawn, mention. S. F. A. C. Atelier Brown.
Albert R. Williams, mention. S. F. A. C. Atelier Brown.
Guy L. Brown, mention. S. F. A. C. Atelier Brown.
H. C. White, mention. S. F. A. C. Atelier Brown.
Fred M. Kramer. S. F. A. C. Atelier Brown.
Wm. J. Helm, mention. S. F. A. C. Atelier Brown.
S. D. Willard, mention. S. F. A. C. Atelier Brown.
J. A. Davis. S. F. A. C. Atelier Brown.
Thos. J. Kent. S. F. A. C. Atelier Brown.
Carl R. Schmitts. S. F. A. C. Atelier Kelham.
H. C. McAfee, mention. S. F. A. C. Atelier Kelham.
Albert H. Larsen, mention. S. F. A. C. Atelier Kelham.
D. J. Dallas. S. F. A. C. Atelier Kelham.
M. W. Morrison. S. F. A. C. Atelier Kelham.
Anthony Hortsman. S. F. A. C. Atelier Kelham.
Bert Badgley. S. F. A. C. Atelier Kelham.
Phil De Louchant, mention. Schadler, Reno.

Trade Notes

The Western Building Material Co. are furnishing 200 carloads of cement for the Multnomah Hotel and John Deere buildings.

J. P. Junkin, Western manager of the architectural department of Pratt & Lambert, with headquarters in Chicago, recently made an extended trip of the Pacific Coast cities.

L. A. Spear, general manager of the Washington Brick, Lime and Sewer Pipe Co., spent a few days in the city recently on his way to Southern California.

F. W. Eastman, Far West Clay Co., of Tacoma, recently visited the trade in this city.

Fred C. Cook, Pacific Coast representative of the Kawneer Manufacturing Co., has returned from an extended trip through the Northwest.

The Pacific Face Brick Co. is furnishing a plastic red brick for R. F. Wassel & Co., who are building an apartment house at Twentieth and Kearney. The brick is a new product of the company and is sure to become popular through its handsome appearance. Another new building in which the brick has been used was erected by Eastman & Co. at Twenty-fifth and East Market.

Victor S. Persons, of the Concrete Steel Product Co., has returned from a short trip to Spokane.

The P. L. Cherry Co. have delivered the paving brick to the Leonard Construction Co. for use in the John Deere Warehouse. The brick arrived in first-class condition and will prove noticeable when put in place.

The Sterling Stone Co., of Portland, is a new corporation. The company was organized for the purpose of manufacturing art stone. H. J. Cress, E. D. Timms and Mr. Burras are the incorporators. The company has already signed several contracts for the delivery of their stone, and a modern, fully equipped factory is now in operation at the corner of East Tenth and Stephens streets.

The Washington Brick, Lime and Sewer Pipe Co. will furnish the brick and terra cotta for the Masonic Temple at North Yakima, Wash.

The Northwest Bridge Works has started actual work on the Masonic Temple at North Yakima.

E. E. Gilmer, well known to the local building trade, is now connected with Timms, Cress & Co.

H. A. Noble, of the Concrete Steel Products Co., left recently for a short visit to his home in Ann Arbor, Mich. Mr. Noble was married on the 22d inst. to a young lady of Kansas City. (Mr. Noble refuses to give us the name of the young lady.) The wedding tour will include an extended trip through Southern California before returning to Portland.

An addition to the city's manufacturing interests is the plant of the Durable Roofing Manufacturing Co. at Kenton. The plant will employ about twenty-five men and will manufacture roofing of felt saturated in asphalt. Dr. J. R. Wetherbee is the president.

(Continued on Page 37)

What Our Canadian Neighbors Think of Reciprocity

From February Issue of Construction, published at Toronto, Ontario

Despite the clamor of a party ridden press in support of the proposed reciprocity pact now before Parliament, a careful dissection of the long list of proposed changes in the Canadian schedules, makes it evident to every broad-minded Canadian, whose judgment is free from political prejudice, that the Government has been made a "cats-paw" of by a United States Government that is madly grabbing at "a straw" in an effort to preserve its very existence. With all due deference to the Hon. Mr. Fielding, and with all reasonable consideration for his ability as Canada's Minister of Finance, it is plain that the proposal he has asked the Canadian Parliament to accept is one arranged and intended as a political trick to secure votes rather than an equitable tariff arrangement designed to promote the National and industrial welfare of Canada.

The proposed changes, so far as they affect building materials, are but few and not highly important. However, in most cases they serve to give an increased advantage to the dumped products of the highly organized and specialized manufacturers of the United States.

There are six lines of products affected by the proposed reductions. Cement is reduced 5½ cents per barrel; freestone, granite, limestone, sandstone, etc., 7½ per cent; roofing slate, 20 cents per hundred square feet; vitrified paving brick, not ornamented, 5 per cent; manufactured asbestos, 2½ per cent; plumbing fixtures, 2½ per cent.

The reduction of 5½ cents per barrel on Portland cement, on the face of it, does not appear to be a very disastrous change as far as the Canadian cement manufacturer is concerned. But when the very unsatisfactory and unsteady conditions of cement prices that prevailed up to a year ago brought about by the ruinous conditions imposed by the dumping of the surplus products of large United States mills are taken into consideration, it can readily be seen that any change that may tend to give the United States manufacturer a further advantage in the Canadian market can not be viewed with favor by the cement manufacturers in Canada.

The cement mills operating in the United States today have an aggregate capacity considerably in excess of the country's consumption, due principally to the rapidly increasing popularity of concrete as a structural material. As a result of this much advertised fact, a large number of cement projects have been promoted and many large plants have been erected and placed in operation during the past few years. The outcome was inevitable. The total capacity of the mills grew more rapidly than the consumption increased. Cement is one of the commodities that the United States can not export except to Canada, and if it were not that we maintain a reasonably fair tariff on cement the American mills would dump their over-production at times when, because of building conditions in the United States, the consumption would fall below normal, thereby crippling the cement industry in Canada, temporarily, if not permanently ruining it.

Again, it must be remembered that the Canadian cement manufacturer has several other conditions to contend with that operate in favor of his American competitor. Coal, which is one of the largest items of expense in the production of cement, costs from 20 to 25 per cent more than it does at the American mills. Labor costs from 30 to 35 per cent more in Canada and our freight rates here are, in some instances, more than double those generally prevalent in the United States. Conditions in the Canadian West are still worse. The cost of the production of cement there is more than double that in our Eastern mills.

So it may be seen that this very important industry, which up to a year ago was almost hopelessly demoralized, has every reason to protest against any further reduction in the tariff on cement. While it is right and proper that cement, a material that of recent years has entered so largely into all kinds of construction work, should and must be supplied at a reasonable and fair price, conditions must not be created whereby the periodical dumping of foreign mills during times of depression is permitted to demoralize the industry in Canada.

The reduction of 7½ per cent on granite does not seem to be either necessary or expedient. Our granite quarries in Quebec are producing some of the finest stone quarried in America, and the reason for this change is not evident.

The reduction on roofing slates and vitrified bricks will affect considerably our existing British preference and will have a tendency to give the United States a stronger hold on this market.

The reduction of 2½ per cent on asbestos products sounds ridiculous. Canada produces 95 per cent of the commercial asbestos in the world. All the raw asbestos used by United States comes from our Canadian mines. It is manufactured there and returned to us. Until recently practically every article in the manufacture of which asbestos entered was imported from the United States. A large new plant is in operation now in Montreal and Mr. Fielding proposes to reduce the duty 2½ per cent.

The reduction of 2½ per cent on plumbing fixtures will simply open a little wider the Canadian market to the operations of the "bath tub" trust of the United States, the methods of which the United States Federal Courts now have under investigation.

A portable theater, offering the advantages and comforts of a modern playhouse, is a new feature in the French theatrical world, which will start on a journey through France in the early part of April. This unique "Thespian chariot," as it is termed, is the outcome of an idea conceived in the mind of M. Gemier, director of the Theater Antoine, Paris, to give the less populous and secondary cities an opportunity to enjoy a higher and more consistently staged class of attraction than those to which they are usually accustomed. The theater is built on the principle of the balloon shed, and it will be hauled in vans drawn by eight road locomotives. Though portable, everything necessary to a first-class theater will be incorporated in its make-up, including properties, stage, and what is more essential from a box office standpoint—an auditorium that will seat an audience of 1500. It will also carry its own lighting and heating system, together with a fire-extinguishing plant, consisting of an electric rotary engine, and a tank on wheels which will be filled before each performance. The company will comprise twenty players, an orchestra, and forty carpenters and stage hands.

Address of E. M. Lazarus Before Portland Architectural Club

Mr. President and Gentlemen or, rather, Chere Colleagues:

I thank you for the honor of calling on me for a traveler's tale, and were I skilled in the art of oratory or could command Dickens' gift of telling a tale, I should feel more at ease in the limelight of this platform. As it is, you will have to make amends accordingly. Speaking of Dickens, I have brought with me tonight a rebound edition of David Copperfield, which I picked up in London and which was published in the original pamphlet form with illustrations in color by Barnard, which I am sure will interest you.

Sailing from New York late in May last, I crossed over with a fellow Oregonian, Homer Davenport, whose love of Oregon, and Silverton in particular, has been instrumental in heralding its fame from the land of where rolls the Oregon to the Bedouin tribes in far Arabia. For where his cartoons are known and admired, so is his love for his home town. Davenport's versatility is remarkable. In mid-ocean he invariably spent two or more hours every day making cartoons in the salon, and on a certain eventful day lost his purse containing all his available cash. A few hours later, on hunting him up, I found him finishing a pen and ink sketch in which he was the central figure with beads of perspiration dropping from his brow, the captain standing at his side gesticulating his inability to account for his loss, and with the salon steward standing by with an expression vacant as atmosphere eyeing the flight of the purse, to which Davenport had affixed a pair of wings, as it vanished in the distance; a cartoon that was afterwards auctioned off at the end of the voyage for the Seaman's Mission for a good round sum.

Davenport and I were determined to go to Epsom Downs to see the Derby run, where a vast concourse of approximately 260,000 persons had assembled to see the race. We reached London at 3 o'clock on the morning of the race, and were up at 8 o'clock hunting for seats on a coach bound for Epsom Downs. The journey to the track and the track itself was a sight never to be forgotten. The endless string of vehicles on the high road to the course, the costers and their diminutive donkeys and carts, with their wives and sweethearts mingling with the more pretentious equipages, enlivening the time with passages of their Cockney wit with their fellow travelers was a great sight, as was the gamins of the gutter, turning handsprings from mile end to mile end to the old refrain:

> The Epsom races have begun,
> Now is the time to have some fun;
> Throw out your mouldy coppers—

and throw them out we did, with a vengeance.

Reverting now to the architecture of England: From the time it was under the protecting arm of Rome, to the Norman period (which, parenthetically, was founded largely on the Southern Romanesque), through the Gothic period, and down to the Tudor, nothing impressed me so much as the simple, quiet Tudor homes, substantially built of brick and stone, set among lovely rural surroundings, with walls, terraces and walks which one is apt to associate with the renaissance of Italy and all the lovely and charming accessories which go to make the perfect country seat. With ideal roads over which to motor, a trip through suburban England is most enjoyable, especially as the experiences of travel are yearly growing rarer, as the facilities for transport are improved.

When one can journey—the word is used advisedly—in forty or fifty hours across two seas and through three kingdoms arriving to all intents unaltered, one can appreciate the true delights of getting away from Cook's itineraries, where a passenger is merely a human bale, bundled into denationalized, localized and Swissified hotels.

When one speaks of the architecture of London, one refers to the Italian renaissance apparent in the works of Inago Jones and Sir Christopher Wren. At the town planning conference held in London in October last, at which I was in attendance, I had an opportunity of studying Sir Christopher Wren's splendid scheme for re-planning London after the great fire, which, had it been accepted, the loss of millions since spent in fragmentary improvements might have been avoided. Unfortunately, the average Englishman is not an imaginative person; and, further, the economical pressure of the rate-payer (tax-payer we call him) on the local authorities, and the strength of vested interests, has always upset any far-reaching scheme for civic improvement. They can no more Hausemanize cities in England than they can here in America, for such a course is only possible where autocratic powers exist.

Mr. John Burns, who welcomed the delegates to the Town Planning Conference in behalf of his Majesty's government, spoke truly when he said he did think that it dawned sufficiently upon people in general the effect of structural environment—good buildings and pleasant homes—upon the character, temperament, disposition and energy of the people. Cities are not mere structures of brick and stone, nor centers only for commerce and trade. They are places where utility, comfort and beauty could be and ought to be combined so that those who visited them, or passed through them, could have their artistic senses awakened and cultivated.

I visited the much advertised "Garden City"—Letchworth—as it is planned eventually to take care of 35,000 inhabitants; it had a scattered, unattractive appearance and lacked in dignity.

On the continent Germany leads the world in town planning. City planning is Germany's greatest contribution to civilization and Germany has discovered that it pays in money dividends, in health, in happiness and well-being to build cities properly, for they are firm believers over there that mean streets breed mean men. The half timber work in Southern Germany has an equal, if not a greater charm to me than its English prototype.

Holland, with its flat landscape, its quaint houses and still quainter people, was irresistibly fascinating. As much as I would love to linger in this country and talk of its wonderful galleries and its God-gifted painters, I must go on, for art is long—time is short.

Belgium, with its fields cultivated up to the last square inch, with cows picketed instead of grazing at large, is full of architectural charm.

Now I will take you on a motor trip from Grenoble to Chamberey—to Aix-les-Bains, to the Convent of the Grand Chartreuse—Bourg St. Maurice, to the top of Petit St. Bernard, to the Hospice on the top of this mountain which is 3257 meters above the sea level, to the foot of Mt. Blanc, then through the Italian valley to Aosta, where one sees the Arch of Augustus, erected in the year 23 B. C.,

the ancient Roman theater, constructed about the same period, and other Roman ruins of great interest.

This trip is famous as being one of the greatest scenic motor trips in the world, and is also noted for the infamous treatment that motorists are subjected to by the Swiss and the Italians.

I was making this trip with a Mr. James, of New York, and we arranged through the United States Consul at Grenoble for a machine and chaffeur to take us from Grenoble to Aosta for the stipulated sum of 625 francs. After several breakdowns in the forenoon of the first day, we finally reached the Italian frontier a day behind our schedule. On reaching the Italian frontier they demanded 635 francs in gold for the return of the machine to French territory and at the Douane or custom house they insisted that this payment be made in gold, refusing to accept their own or French paper. Protesting that we did not have the amount of gold demanded, we were finally conducted to a dwelling back of the custom's house kept by three old women, who exchanged the paper into yellow metal on the payment of $18 exchange, and we went on our way *rejoicing*—for want of a better word.

Returning to this country, I attended the American Civic Association convention in Washington, where Thomas Nelson Page, the famous Southern author, launched forth into a scathing arraignment of American art with Statuary Hall in the Capitol as a target for his verbal darts.

"Art may be called a luxury, and is a luxury in the United States, for we have made it so. There is no country on earth where the poor are so shut out from the uplifting contact with art as in America. Our government, that is, the people of the United States through our representatives, have barred the door against Art and have refused to let it in." And he further went on to state that he wanted "Art made as free as air, for it is in an atmosphere charged with Art that Art flourishes."

Speaking of the part of the capitol at Washington known as Statuary Hall, he went on to say that even the most patriotic sentiment by the most devoted American can not view that collection without a shudder at the grotesqueness of that group of men who, it may well be said, have deserved better at the hands of their countrymen.

That some are good, and that one or two are even fine may well be admitted, but jumbled together as they are in every form and fashion of modern dress, of every size from pigmies to giants, they present together a terrifying spectacle of what the best in this country is able to achieve.

However, Mr. Page's criticism may be justly applied to art in this particular connection, it is not to be denied that the best architecture of the best men in this country today leads the world in meritorious design.

In modern European work, aside from the art Nouveau of France and Germany, one sees a resurrection of dead classical bones, with little understanding of the application of classic principles; merely, in fact, a stringing together of classic details, but in the best work in New York and adjacent cities classic art is as alive today as it ever was.

Leaving Washington, I recrossed this continent with the delegates in their special train to the convention of the American Institute of Architects, held in San Francisco in January last. A jollier crowd I have never met and a more enjoyable time I have never experienced. You are all conversant with the transactions of the institute at the recent convention, so I will not tire you with a repetition.

I am afraid, gentlemen, that I have encroached too much on your good nature as it is. I have to thank you for your presence, and wish you good night.

OUR ILLUSTRATIONS

Westminster Presbyterian Church

The new Westminster Presbyterian Church, designed by Ellis F. Lawrence, will occupy the Irvington block, bounded by East Fifteenth, East Sixteenth, Schuyler and Hancock streets. Its estimated cost, including that of the Sunday School building, which will be in the form of a wing to the main building is $80,000. The building will probably be a stone structure, although brick may be substituted.

The style is English Gothic and is suggested by the village church type in England. The auditorium proper will seat 1000 people, the Sunday School 850, and the social room in the basement 650.

The Sunday School wing is relieved by the second story in half timber work, which should make an agreeable and pleasing contrast with the simple stone surfaces of the church proper.

The plan of the main building shows a cruciform with nave and transepts, the crossing marked by a lantern tower which in outward appearance centers on the lot and dominates the composition from all approaches.

Interior decoration will be Gothic in character. The roof trusses will show and the entire ceiling is to be done in native wood. In the transepts, lanterns and naves the windows are to be done in stained glass.

The organ, which is to be one of the principal decorative features of the auditorium, will be placed directly back of the chancel.

In addition to the auditorium and Sunday School room provision is made for a pastor's study, choir room, infants' room, kitchen and twenty class rooms.

Multnomah Amateur Athletic Club

The new Multnomah Amateur Athletic Club building, of which Whitehouse & Fouilhoux are the architects, will be located at the south end of the field along Salmon street. It will be five stories in height on the north or field side and three stories high on the Salmon street side.

The design of the exterior will be cement plaster, finished with a warm gray color. The belt courses, architraves, balustrades and other trimmings of the exterior are to be treated in a warm, cream white color. The character of the design is a simple treatment for a cement exterior followed along the general lines of the Italian architecture.

The interior in design, will be simple, straightforward work. The main feature for the interior design will be on the first floor, namely, the main hall, lounging room and reading room. These rooms will be more elaborate in finish than the remainder of the building, yet at the same time the scheme will be quiet and not "gaudy." The idea is to give an harmonious, dignified appearance and keep the rooms above mentioned as a man's club, and yet at the same time have them pleasing to all eyes.

The sub-sub-basement contains a boiler room 46x36, boilers, boiler feed pumps, pool water heater, also a generating set for electric lighting.

The sub-basement will contain a fan room that will distribute pure air throughout the locker rooms, billiard, card, lounging and writing rooms, main hall, handball, squash and racket courts.

The athletic department contains one locker room for members and one locker room for visiting teams, a rub room, a dry room, a toilet and shower room.

The Turkish bath department has two hot rooms, the first one to be heated at 140 F., the second one at 190 F. It also has a steam room and plunge 12x15 feet, showers and rub tables. A waiting room, a large bed room, toilet and large linen closet are provided in this department.

The basement is largely occupied as a locker room. The seniors' locker room can accommodate 1000 lockers; the ladies' room will accommodate 316 single or 600 double lockers and the juniors' room has accommodation for 177 single lockers. Just west of the lockers on the lower floor level is the location of the swimming tank, which will be 30x75 feet, and will vary in depth from four feet at its shallowest part to eleven feet at the diving end. The sides and floor of the tank will be lined with glazed tile, with provisions for the illumination of the bottom with electric lights on special occasions. Steps extend into the water at the shallow end and two brass ladders are recessed in the sides of the tank at the diving end.

A gallery extends around three sides of the room and ample light is provided by six very large windows on the south side of the building. The swimming instructor has quarters on this floor, and there are also shower bath rooms, a steam room, and the ladies' locker room connected to the swimming tank through a dressing room and a special shower room.

At the east end of the main portion of the building on this floor is the location of the bowling alley, which occupies 32x100 feet, including the space set apart for the spectators. On this floor are also located men's toilet, tub bath room, towel room, store rooms, etc. This floor has direct access to the field through an open loggia.

On the main floor, which is on a level with Salmon street, is a hall of large proportions, its dimensions being 21x88 feet. Opening from the hall to the east is a cloak room, and west of the entrance is the main office, in which is a built-in concrete vault. Directly north of the main entrance is the lounging room, 43x50 feet, with light ceiling and five wide openings to a glazed porch just off the main terrace. Opening from this room is the writing room and the card room. Along the side of the wall separating the hall from the lounging room will be large glass cases built in between the archways to hold the medals and trophies won by the club members. These can be seen from both the hall and the lounging room.

The reading room is 35x45 feet, and is at the west end of the hall. At the east end of the main hall is the billiard and pool room, which is large enough to accommodate twelve tables.

The separate rooms are also provided for the directors' room, committee room and private office. Running along the entire field side of the building and returning partly on the east and west sides, is a wide, concrete porch with concrete and wood rails.

On the second floor is the gymnasium, 65x95 feet in dimensions, with adjoining rooms for the instructors; the boxing and wrestling rooms on either side of the gymnasium are 25x35 feet. On the second floor are fourteen bed rooms, equipped with electric lights and running water in each room. Every room will have a separate clothes closet; toilet rooms with shower baths are provided on this floor.

The third floor will be occupied by the upper part of the gymnasium, there being a running track at this level, as well as a spectators' gallery. There will be two storage rooms on this floor for gymnasium apparatus, seats, etc.

The balance of the floor is occupied by 21 bed rooms, the arrangement being similar to the bed room space on the second floor.

The attic will be occupied by a fan with a battery of heating coils for ventilating of the gymnasium and the wrestling and boxing rooms.

There will be two handball courts located in a wing at the east side of the building. The courts will be 53x77 feet and contain space for spectators' gallery. A large portion of the roof over these courts will be of glass, insuring a quantity of light.

There will be four squash courts, 35x75 feet, at the west side of the main building. They will be reached from the main building through a passage and have direct connection from the outside. These courts will also be flooded with plenty of light by means of sky-lights.

On each floor there will be placed drinking fountains, slop sinks, and ample fire protection will be afforded by hose racks at each end of the building. There will not be less than seven ways of egress from the main part of the building on the second or gymnasium floor, and the other floors are equally well provided for.

Provision has been made so that the outline of the entire building can be silhouetted on special occasions by means of electric lights, and the same provision has been made for illuminating the terrace and stairways.

Trade Notes—Continued

W. J. Wood, marine architect of Chicago, appointed by the City Executive Board to prepare the plans and superintend the construction of the new steel fireboat, arrived in Portland recently. Mr. Wood designed boats for Milwaukee, Chicago, Buffalo and other large cities, and in each instance it is said they have proved successful.

C. A. Wolfgang has incorporated the Coast Supply Co. and is doing business at 310 Railway Exchange building. They have secured the local agency for the well known line of the Berger Manufacturing Co.

The terra cotta for the John Deere and White buildings to be furnished by the Washington Brick, Lime and Sewer Pipe Co. has arrived.

The L. A. Norris Co., of San Francisco, has opened a local office at 320 Worcester building. A. L. Wilcox is in charge.

The Pacific Face Brick Co. are furnishing their dry pressed gray for the Pallay apartments erected at the corner of Twenty-second and Glisan streets, also the tan and buff plastic brick for the apartment building of Morgan, Feidler & Boyce, being erected on Ford, near Washington.

The Washington Interior Decorating Co., of Seattle, who had the contract for the interior woodwork of the new county courthouse, defaulted on their contract and later went into bankruptcy. The contract price was $8900. It is said that the bonding company has refused to make good.

The February issue of *Suburban Life* contains a glowing description of Seattle under the head of "Seattle, the City of Progress." The article was written by Frank A. Arnold, secretary of the publication, following a visit to the Pacific Coast last fall.

The Bass-Heuter Paint Co. are distributors of "Interio," a wall finish, which is being used in the Savoy, Sorento and Monte Cristo hotels of Seattle; the new depot of the Oregon-Washington Railroad & Navigation Co. at Seattle; Portland Hotel, Board of Trade, and many apartment houses and residences. C. A. Finn is general representative.

Building News of the Month

Bonds to the amount of $700,000 will be voted to cover the cost of the erection of a new high school for South Tacoma and to take care of several additions to other schools of the city.

Plans are being figured for a new schoolhouse to be erected at Stanfield, Ore.

The Douglas County Court has purchased $8000 worth of road building machinery including two complete rock-crushing plants, sixteen graders, thirty-one Fresno scrapers, twenty-three slip scrapers, twelve road plows and four road rooters.

The foundations for the new high school building being erected at Spokane have been completed. M. C. Murphy is the general contractor.

Pacific Telephone and Telegraph Co. will spend nearly $1,000,000 the current year. This amount includes the cost of a handsome new building to be erected on the West Side.

Eugene, Ore., will vote on the proposition to bond the city $28,000 for the completion of their sewer system.

Dr. J. W. Morrow has purchased three lots in Laurelhurst and will erect a $10,000 residence on them.

Architects Kroner and Henn have let the contract for the altering of the Yamhill County courthouse to Welch & Wright.

Architects Troutman and Leather, of Aberdeen, Wash., are preparing plans for the erection of a new high school, which will be modern in every respect.

Prescott, Wash., will begin the erection of a modern brick and stone two-story school building to be built at a cost of $35,000. The building will contain a gymnasium in the basement, and auditorium on the second floor, and eight class rooms.

Kennewick, Wash., voted bonds to the extent of $60,000 on February 28th for the erection of a new high school building.

The Sisters of Mercy have purchased a half block on Third street, between Multnomah and Hassalo, and will erect a home for girls in the future.

Plans have been prepared for the erection of a $16,000 bungalow on the fruit ranch of Austin Corbin in the Rogue River Valley district.

Architects Williams and Rasmussen are preparing plans for the erection of a theater building at St. Johns for Buckner Bros.

Plans are being prepared for the erection of a $15,000 home for Robert Brooke to be built on East Fifty-fifth, near Salmon street.

F. F. Haradon has purchased a quarter block on East Davis and will erect a three-story brick building for the use of a wholesale grocery house.

Edward O'Shea is having plans prepared for the erection of a business block to be erected on Hamilton street, Spokane, at an estimated cost of $60,000.

Contracts have been let for the rearrangement of the ground floor of the Bowers Hotel at a cost of $5000.

Plans are being prepared for the erection of a new school house at Union at a cost of $50,000 to $60,000.

Architects Preusse and Zittell, of Spokane, are preparing plans for the new City Hall to be erected there.

Work has begun on the construction of the eighteen-story Hodge building to be erected on the corner of Second avenue and Cherry street. It will be built on the site of the first brick building erected in Seattle following the fire of 1889. The plans of the architects, Bebb and Mendel, call for a reinforced concrete steel and a combination of brick and terra cotta for the front. The building will be entirely fireproof construction, cost $600,000 and is being erected by the Union Savings and Trust Co.

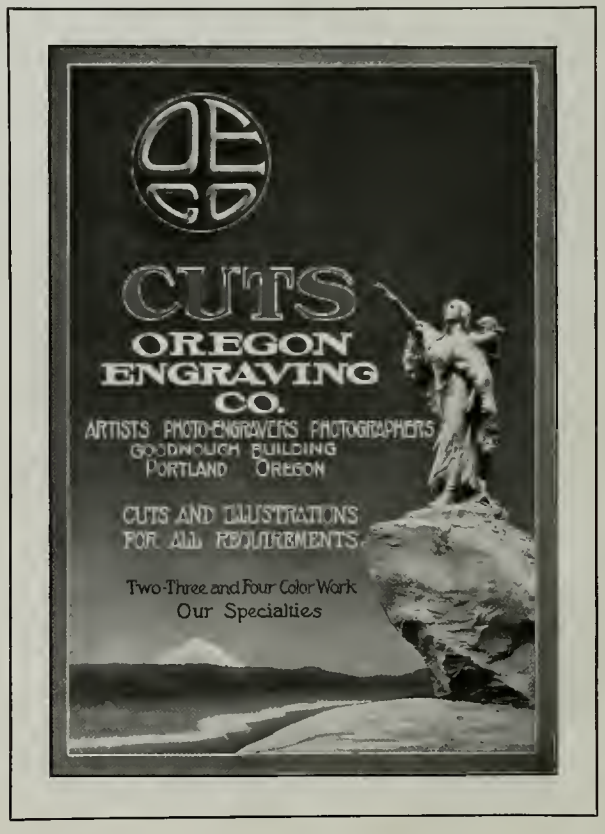
The Commissioners of Klatsop County, Washington, will arrange for a bond issue to cover the cost of building a macadamized road from Colby to Clifton.

W. H. Maxwell, of Great Falls, Mont., was the lowest bidder for the construction of the public building at North Yakima, Wash., The bid was $178,774.

Contracts will soon be let for the construction of the San Francisco Polytechnic High School, which will be one of the best equipped schools of its kind in the world. The plans were designed by Alfred I. Coffey, city architect, under the supervision of A. Lacy Worsewick, in charge of all school work, and call for a reinforced concrete, steel, brick and terra cotta building. The structure will be purely classic with a leaning toward French Renaissance. It will be erected on Frederick street, between Willard and First, and the estimated cost is $600,000.

William Reidt will shortly begin the erection of a $30,000 garage on Kearney street. The building will be three stories and will be built of concrete.

A hotel containing 1600 rooms and 1000 baths is to be erected in New York City on a site bounded by Broadway and Sixth avenue, Thirty-third and Thirty-fourth streets. The accommodations to be provided will be considerably in excess of anything now offered by present existing world-famed hostelries. The structure is to be known as the Greely Square Hotel, and will be built at an outlay of $14,000,000. It is to be ready for occupancy September 1st, 1912.



THE PACIFIC COAST ARCHITECT

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OFFICE OF PUBLICATION
PORTLAND OREGON

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The Pacific Coast Architect

VOLUME 1 — PORTLAND, OREGON, MAY 1911 — NUMBER 2

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F. O. THOMSON, *Editor* GEO. L. BLIVEN, M. E., *Associate* L. J. FLYNN, *Advertising Mgr.*

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The Editor will be pleased to consider contributions of interest to the readers of this publication. When payment for same is desired this fact should be stated. Self addressed envelopes must accompany all such contributions.

ADVERTISING RATES ON APPLICATION — TELEPHONE MAIN 5121

NOTICE: Beginning with the June issue of the Pacific Coast Architect, the subscription price will be advanced to Two Dollars and Fifty Cents per annum. Those who have not already subscribed can save a dollar by getting their subscription in before the June issue.

Let Us Have A Little Light On The Question

It is to be sincerely hoped that the Stone-Webster Engineering Company will carry to a finish their threatened suit against M. L. Kline. If there is a plumbers' trust, let us have a little light on their methods of doing business. If there is no combination, as alleged by Mr. Brayton, Mr. Kline is entitled to his vindication.

Mr. Kline denies that there is a "trust." Seems to us, we have read the same denial in connection with the suit of the Government against the Standard Manufacturing Company, of Detroit, and other manufacturers of plumbers' supplies. At the same time, we have the spectacle of the attorneys for the defendants attempting to pledge the prosecutors for the Government to a fine providing a plea of "guilty" is entered. This was refused by the judge, who stated, according to reports, that a prison sentence would be a part of the punishment for the infraction of the Sherman law.

Some time ago a suit was filed against the same kind of a combination in Milwaukee, Wis., where a plumber who was not a member of the combination claimed that he could not secure materials If we remember correctly, there was a scurry on the part of the members of the combination to see who would be first to turn "state's evidence" and thus secure immunity.

It is our personal opinion that there is a "trust," or "combination," and a strong one, at that. A verdict of a jury in the controversy will give us an opportunity to "apologize"—maybe.

Sociability As A Cure For Abuses

Those of you who were fortunate enough to be present at the annual dinner and meeting of the Portland Architectural Club, a full report of which appears on other pages, could not help but be impressed with the spirit of good fellowship in evidence. Like all professions, the architectural suffers from abuses to which it is heir.

The unwritten code of ethics which ought to govern the architect is too often forgotten or too easily set aside for some special occasion. In this age of keen competition we are too prone to chase the "dollar" and allow the "ethics" to take care of themselves.

You have propably heard the expression that the way to a man's heart and pocketbook was "through his stomach." The sociability which is inseparable from a gathering of this kind will surely bring about a better understanding among the architects.

Carpenters' Strike at Vancouver, B. C.

At a recent fully attended meeting of the Master Builders' Association reports were received from the different large contractors interested in the association and others in the city, reporting that they had practically all the men they required working at the standard rate of wages which was decided at the commencement of the strike. There was no difficulty in equipping all the buildings in course of construction with as many men as were required, it was reported.

The action taken by the trades union against the employment of non-union men on their Labor Temple building was also discussed, but any action that has been taken against the contractors in no way alters the condition of affairs or affects the stand the Master Builders' Association have taken against the demands of the labor union.

The Master Builders' Association have appointed a deputation to meet other organizations and interests who have not heretofore worked in close harmony with them, to make arrangements for a closer working in the future, so that the city may not be affected by the conditions which have reigned in the past with the unions, and they have also decided that none of their members will figure on any work in the future where strict clauses are included in the contract tieing their hands as to who shall be employed.

The Master Builders' Association are quite satisfied with the stand they have taken, and with the condition of affairs at present. They hope for a good building season.

We Wish To Thank Our Well Wishers

We are sincerely grateful for the words of praise showered upon us following the first issue of the PACIFIC COAST ARCHITECT. We made strenuous efforts to answer all the letters, but early fell by the wayside. So we are adopting this method of extending our thanks. We are also thoroughly appreciative of the bits of good advice and the spirit in which they were offered. We shall, from time to time, adopt some of the suggestions, while others seem inadvisable at this early state of our career.

Responding to a request from many of our friends among the engineers, we are establishing an engineering department in this issue, which will be under the able supervision of Mr. George L. Bliven, secretary of the Oregon Society of Engineers. We sincerely trust it will prove of value and interest. We are arranging for a number of articles of more than ordinary merit which we believe will prove instructive.

As already announced, the subscription price of the PACIFIC COAST ARCHITECT will be advanced to two dollars and fifty cents with the June issue. We are taking this step after due deliberation. The only adverse criticism we have heard has been on account of the cheapness of the publication. We believe it is worth more money, and are therefore making the increase.

Those of you who have not already subscribed can save a dollar by sending in your subscription before June 15th, as no further announcement will be made. Send in your check before you forget it!

Building Permits Fall Off For April

The building permits for the month of April show a decided falling off from the same month last year. Vancouver, Seattle, Spokane and Portland show a material decrease in the value of permits issued.

While the local records show an increase of about 17 per cent in the number of permits issued, the valuation shows a decrease of 9 per cent. The record made by April last year was a remarkable one, which was made possible by a number of large concrete and steel buildings which were started at that time. This year permit for only one large building was taken out.

Annual Meeting, Portland Architectural Club

(Continued from Page 50)

Other problems were:

Esquisse Rendu:

Pupin Prize, 1; 0 Aerodome.
Paris Prize, 3; 2 Ornamental Stairway Museum.
Archaeological Problem, 1; 0 Tinted Ceiling Italian Renaissance.
Esquisse-Esquisse, 4; 3 No Mention.

In my recommendations to the new officers of the Club for the development of the Atelier, I wish to state that this does not depend wholly upon them, for they need the support of every member. In the first place, to increase the number of students, we need better quarters not only for the light, but to have rooms that will inspire and awaken the feelings in the men. We need a room for a library in connection with our drawing room, also good wall space to exhibit work so the students can see what has been done before them and use former drawings as examples for future work. I think if we can obtain these new quarters there will be an increase in our student body. Lack of suitable quarters, I think, is one reason we have not been able to have more men taking the problems, especially in Class A.

There was one portion of our work laid out for the past year that fell decidedly flat—the short talks about History of Architecture and Ornament. Mr. Logan went to the trouble of making charts, drawings, etc., for a very interesting course, and one that would not only be interesting but a great help to the younger draftsmen. I sincerely hope during this coming year that the class of Architecture and Ornament can get a good hold on the younger men, and I hope the new officers will do all they can to see that that class is started and well attended.

Before closing, I would like to call the new officers' attention to the Free Hand Drawing or Life Class in the Atelier. This is last, but I can not say least. I do not think anyone in architectural work can have too much free hand drawing. Many of our draftsmen are weak in that line, and I would like to see more interest and life put into our free hand drawing this coming year. The men of the Club are the ones to make it a success. The help the student receives from the older men criticising the work should be appreciated, and the only way to have it appreciated is for all the students to get together and have the architects encourage their men in the offices to do this work and stay with it—it will help both the architects and the draftsmen.

I wish to thank both Mr. Lawrence, our President, and Mr. Logan, for their assistance during the past year, and I know the men who did the work under them join me in the same.

Yours very truly,

MORRIS H. WHITEHOUSE,
Chairman Scholarship Committee.

The election of officers for the ensuing year resulted in H. Goodwin Beckwith being elected President; Andrae Fouilhoux, Vice-President; W. H. Flanigen, Secretary; and W. P. Dawson, Treasurer.

The officers and chairmen of the committees constitute the Executive Committee.

The Committee on Permanent Quarters announced that an effort would be made to secure permission to erect a bungalow on the roof of one of the large office buildings. It is probable that, at the next meeting of the Club, the committee will recommend the erection of such a building on the roof of the Board of Trade Building.

During the coming year particular attention will be given to the Life and History classes, and the Club will also enjoy a series of travel talks.

President Beckwith announces the following committees:

Class and Educational Committee—Morris Whitehouse, Chairman; Ellis F. Lawrence, Frank Logan and John M. Hatton.

House and Library Committee—A. F. Curtis, Chairman; C. Green and H. P. Bergen.

Entertainment Committee—L. C. Rosenberg, Chairman; W. G. Hathaway, J. Hatton and J. Arnot.

Publicity Committee—L. L. Hall and F. S. Allen.

Annual Dinner and Meeting of the Portland Architectural Club

The annual meeting and dinner held at the Commercial Club rooms Tuesday, May 2nd, was one of the largest held in the history of that organization, over sixty men sitting down to the dinner. The spirit of good fellowship was extremely noticeable and the meeting was one long to be remembered. The dinner was pleasantly interspersed with selections by the Club Quartette.

Following the dinner President Lawrence called the meeting to order and delivered his summary of the year's work as follows:

ANNUAL REPORT OF THE PRESIDENT.

For five years the Portland Architectural Club has been striving to cement together, in bonds of good fellowship, common understanding and common sense, the architectural profession of this city.

Permit me, tonight, to briefly review some of its achievements and to point out to you why it has long since demonstrated its usefulness and why it should enter into its new year with courage and confidence.

After inaugurating the annual exhibits and publishing its first year book, the Club realized the possibilities in a reunion of the architectural clubs of the Pacific Coast, in establishing a series of exhibitions which would make possible the financing of exhibits including numbers of the best Eastern works, and also a uniform scholarship work with suitable accompanying prizes. With this in mind the Club called for a convention of architects and sent its representatives North and South to explain the purpose of such a convention. Mr. Linde met the Seattle men and the speaker enjoyed a trip to Los Angeles and San Francisco. The result, as you know, was the formation of the Architectural League of the Pacific Coast, in Portland nearly three years' ago, with Willis Polk the first President. Emanating from this was held, last year, under the able management of M. A. Vinson, a series of five exhibits—Denver, San Francisco, Los Angeles, Seattle and Portland. Few Eastern exhibits ever equalled these exhibits in quantity and in quality. The four year books published in connection with these exhibits furnish a valuable brochure of recent works in the Pacific West.

The scholarship work, systematized under the direction of the League committee, has continued under the Beaux Arts society as carried on by the Portland Architects' Club before the formation of the League. An attempt is now being made to raise a permanent Scholarship Fund, and $1,000 is assured this year as a Travelling Fellowship to be awarded the man winning first mention in a given projet. Our Club has subscribed $200 to this prize and a committee appointed by President Rosenheim consists of Ion Lewis, Joseph Jacobberger and the speaker will have charge of raising our share of a permanent fund for this purpose.

When the Charter Revision Commission was at work framing a new Charter for the city, the Club saw an opportunity to establish an "Art and Building Commission." Acting accordingly, a committee was appointed and appeared before the Charter Commission, which adopted the suggestions offered. This was an attempt to legalize a commission whose duty it should be to protect the Art Standards of the city, and to promulgate plans for the "City Beautiful." Unfortunately, the new Charter was lost, and with it the Art and Building Commission. The Club, however, secured a survey of the city, and sending copies to its members, invited ideas as to a city plan with the intention of drawing from all and formulating a Club plan as it were.

In the meantime the new postoffice was announced, and Senator Bourne was appealed to to delay definite location of this important building until the civic center had been selected and studied.

The idea apparently appealed to Senator Bourne, who got in touch with D. H. Burnham about the matter and called a meeting of twenty of his friends, and started a fund of $2000 with which to employ E. H. Bennett—Mr. Burnham associated. This movement, thanks to the councils of certain members of the club, grew into the Civic League, on the Executive Committee of which the speaker has the privilege of being your representative.

Although we might wish a little more foresight had been used in preparing for this vital matter—legalizing a City Plans Commission, as Seattle has done—no better man than Mr. Bennett could have been selected, and the outlook for the fulfillment of a portion of his plan at least in the next decade is promising.

The architects must put their shoulders to the wheel if the Bennett plan is to be properly explained to the people. We must emulate the example of our Seattle brothers who are now giving a series of lectures on the subject in their city. They have written asking that our men come there to aid the general cause, and we can surely make use of their enthusiasm and eloquence in our own campaign to come.

During the past five years an important part of the Club work has been the lectures given on travel, history, and technical subjects. The building code has been constantly before us and although our committee's ideas were not always followed in such matters, the weight of our position was recently exemplified when the Council Committee on Police and Health postponed action on the new plumbing code until we had carefully criticised the new law.

The Club was instrumental in forming the new Builders' Exchange, calling the first meeting after asking the several Masters' Associations to select representatives. The speaker was waited upon yesterday, as a result of this, by deputation of the Employers' Association, which fears union control. Our position in the matter, formulated at a meeting attended by Messrs. Doyle, Jacobberger, Schacht, Beckwith, Wilson, Root, Logan and Lawrence, is a safe one—our endorsement being couched in the term, "if properly conducted." It is unfortunate that one of the firms there represented has gone on record to the Employers' Association as condemning the Exchange, and declaring that no reputable architect will support it. Notwithstanding, the Exchange, "if properly conducted," will facilitate business to a marked degree and will develop a higher standard of building.

During the past year, at the request of the City Council, the Club, through its committee of Messrs. Jacobberger, Fouilhoux, Wilson and Lawrence, made an investigation of the cost of school houses throughout this county. A minimum was recommended of twenty cents a cubic foot for high schools and sixteen cents a cubic foot for grammar schools, or $150.00 per pupil.

A study was made also, at the request of the Council, of the methods used in appointing architects for public schools, and a recommendation was made that the Boston procedure be adopted. They have a special commission in whose hands rests only the construction work. Their duty is to standardize requirements, to maintain a drafting force for small work, and to select a competent architect for the larger work.

To stimulate interest in the Club during last year's exhibition, an original comedy, written by Mr. Dawson, was successfully produced by members of the Atelier. A more ambitious attempt is promised for the near future. We have enjoyed baseball games, bowling matches, Christmas festivities, and the House Committee has performed splendid work on the spreads for the monthly meetings.

The membership of the Club has increased in five years from twenty to about eighty, and tonight we have the pleasure of announcing the following new members, acted upon at our last Executive Committee meeting: Ion Lewis, C. L. Horn, W. Mills and Thomas Hawkes.

Bills were drafted and submitted to the last Legislature calling for the licensing of architects and making compulsory the selection of architects by competition for all State work amounting to over $5,000. These bills were lost for lack of lobbying.

For a time there has been a growing sentiment among the members of the Club that its work should be confined to social and educational work. As the Oregon Chapter of the American Institute of Architects is assured, and as it should be the proper body to act upon public and professional questions, a special committee was appointed to draft a new Constitution for the Club. This committee consisted of Messrs. Beckwith, Logan and Hatton. The new Constitution was read and approved at the last monthly meeting, and is now ready for your final vote tonight.

To insure the success of the educational work, and to overcome our present great handicap in our lack of quarters, a subscription list has been passed around among the members and about $800.00 has already been subscribed with more in sight. This should guarantee at least one year's rent and will go a great way towards furnishing the new quarters. The list is printed below:

Several suggestions have been made concerning quarters and it is probable that the Club will build its own on the roof of some building, or secure a small house on the outskirts of the business section of the city. The Engineers' Club has suggested that we go in with them in securing Club rooms, and this should be considered, for it would make possible a more attractive library. Gifts are already coming in and it should not be difficult to obtain attractive furnishings from our patrons. John Calvin Stevens, of Portland, Maine, has kindly donated one of his paintings to the cause, and we hope our local men will fall in line with gifts of books and furniture.

In closing, permit me to thank you for your continued support in my poor efforts on behalf of the Club, and let me say I have been amply repaid for my time and effort in the strong friendship I have made with the active men of the Club.

ELLIS F. LAWRENCE,
President.

Following the reports of the Secretary and Treasurer, and their acceptance, Mr. Whitehouse, chairman of the Committee on Scholarships, reported as follows:

REPORT OF THE SCHOLARSHIP COMMITTEE.

Mr. President and Fellow Members of the Portland Architectural Club:

The student work of the Beaux Arts Society, under guidance of the Portland Architectural Club, has had a very successful year, as far as the work has been concerned, but has not been so successful in the number of students studying.

At the beginning of the year, when the first programs were received, the class numbered 16 men, but as different problems were in order and finished, the class gradually decreased until there were six men left. These men who were left have worked hard and earnestly, and one can easily see the great improvement that has been shown in their work, not only in draftsmanship, but in their manner of studying both the esquisse and the development of plan, elevation and detail in the future study of the problems to larger scale.

The work has been divided into different groups, namely: Class A, Class B and order problems, as well as the Archaeological and different prize drawings. In the Class A our atelier has not had men entered. The reason for this is not on account of our having men eligible, for I know of plenty who are in different offices in the city that are very able to do the work. The question arises, why do not the men go into this sort of work? This question, I think, I can answer and will try to do so later on in my recommendations to the new officers who are to be elected tonight for the ensuing year.

In the Class B work of the Society, I think we have done well, as this is really our first year that we have had men take an interest in it.

The problems have been very interesting as a whole, and the men, with few exceptions, have sent to the Jury creditable work.

The following problems were done this year:

A Garage for a country estate:
1 man entered and took the esquisse.
1 man completed the projet rendu.
1 man received mention.

A Museum, the second problem:
2 men entered and took the esquisse.
1 man completed the projet rendu.
0 man received mention.

A Winter Circus, the third problem:
4 men entered and took the esquisse.
2 men completed the projet rendu.
0 men received mention.

A Town Hall, the fourth problem:
5 men entered and took the esquisse.
2 men completed the projet rendu.
1 received mention.

Tomb for a National Hero:
1 man entered and took the esquisse.

This being the last problem received, I cannot say anything further in regard to it, as the men have some weeks yet to work on it.

The Order Problems were as follows:

Entrance Gateway through Building to Court yard:
9 men entered and took esquisse.
5 men completed rendu.
4 men received mention.

Portal to Fortress:
8 men entered and took esquisse.
4 men completed rendu.
2 men received mention.

Treatment of portion of Terrace Wall:
5 men entered and took esquisse.
4 men completed the projet rendu.
1 man received mention.

Peristyle with Porch and Portico to a Court House.
5 men entered and took the esquisse.
2 men completed the projet rendu.
1 man received mention.

A Pavilion at the Angle of a Court of Honor:
2 men entered and took esquisse.
2 men completed rendu.

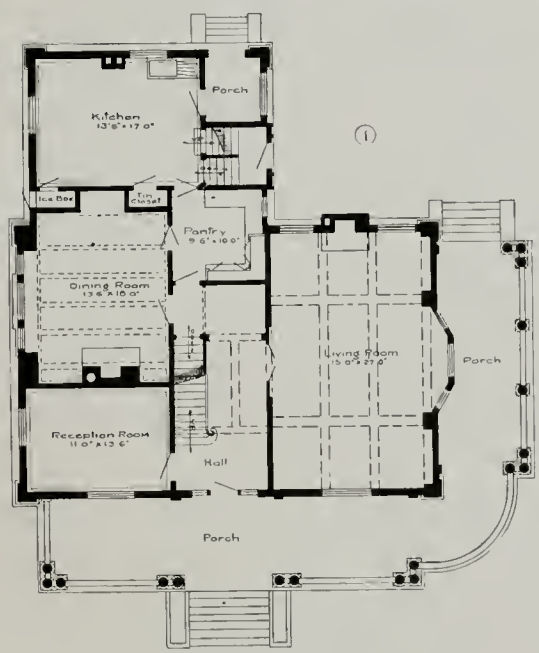
The last problem and drawings are not to be finished for some weeks.

(Continued on Page 48)

Glyn Building, Vancouver, British Columbia
Gould & Champney, Architects, Seattle, Wash.

Elevation. Residence for Mr. Fred Phair
Clarence Z. Hubbell, Architect, Spokane, Wash

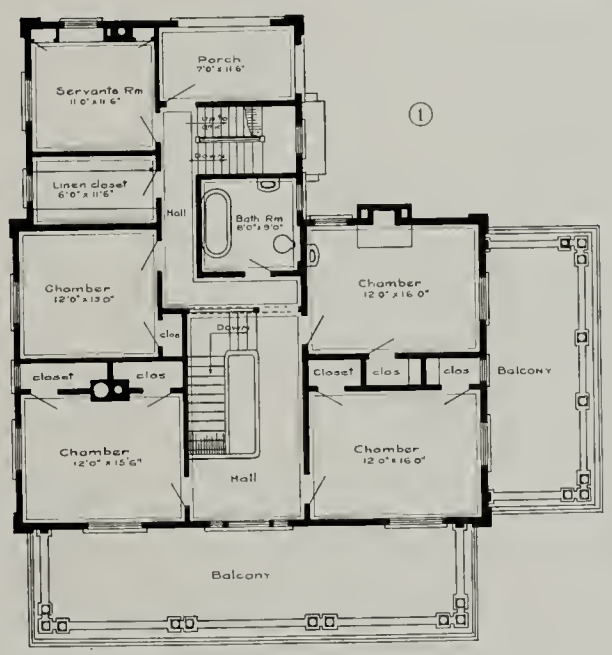
Living Room, Residence for Mr. Fred Phair
Clarence Z. Hubbell, Architect, Spokane, Wash.



FIRST FLOOR PLAN

First Floor Plan, Residence for Mr. Fred Phair
Clarence Z Hubbell, Architect, Spokane Wash

Dining Room, Residence for Mr. Fred Phair
Clarence Z. Hubbell, Architect, Spokane, Wash.



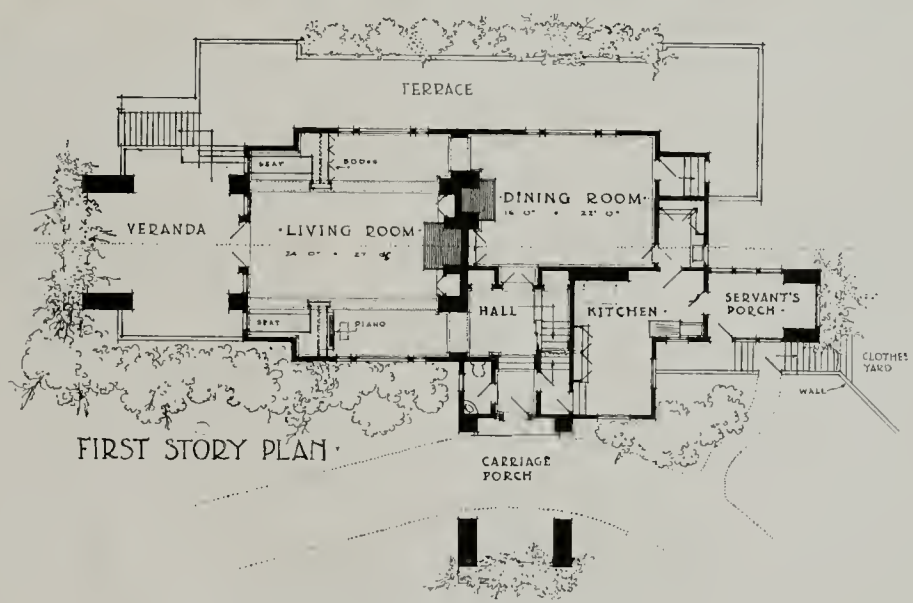
SECOND FLOOR PLAN

Second Floor Plan, Residence for Mr. Fred Phair
Clarence Z. Hubbell, Architect, Spokane, Wash.

Front Elevation, Country Residence for Mr C. H. Clarke
Willatzen & Byrne, Architects, Seattle, Wash.

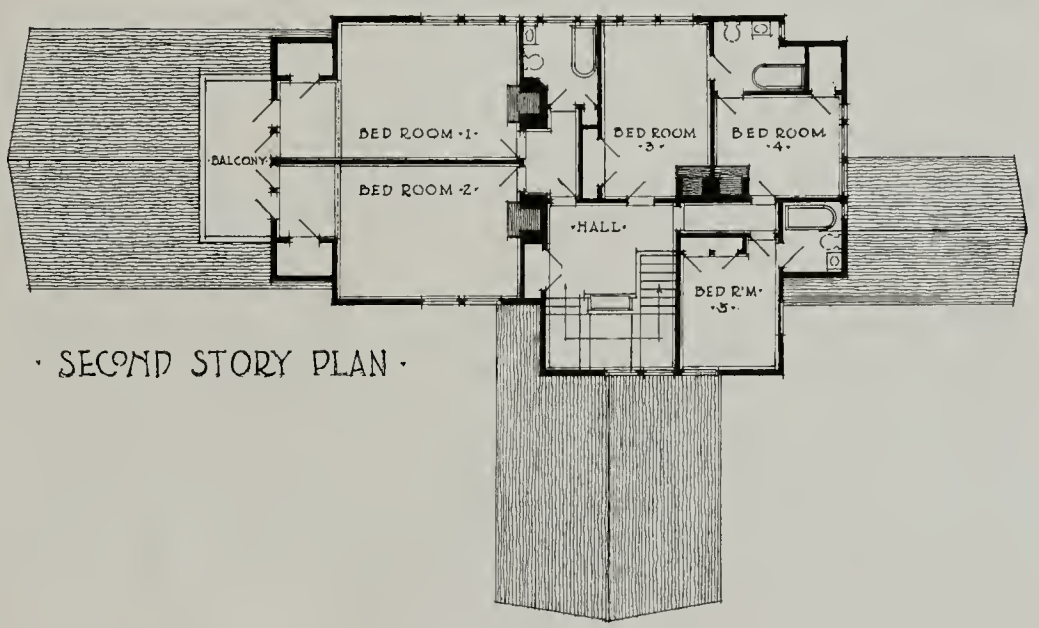
Side Elevation, Country Residence for Mr. C. H. Clarke
Willatzen & Byrne, Architects, Seattle, Wash

Dining Room, Country Residence for Mr. C H Clarke
Willatzen & Byrne, Architects, Seattle, Wash



First Floor Plan, Country Residence for Mr. C. H. Clarke
Willatzen & Byrne, Architects, Seattle, Wash

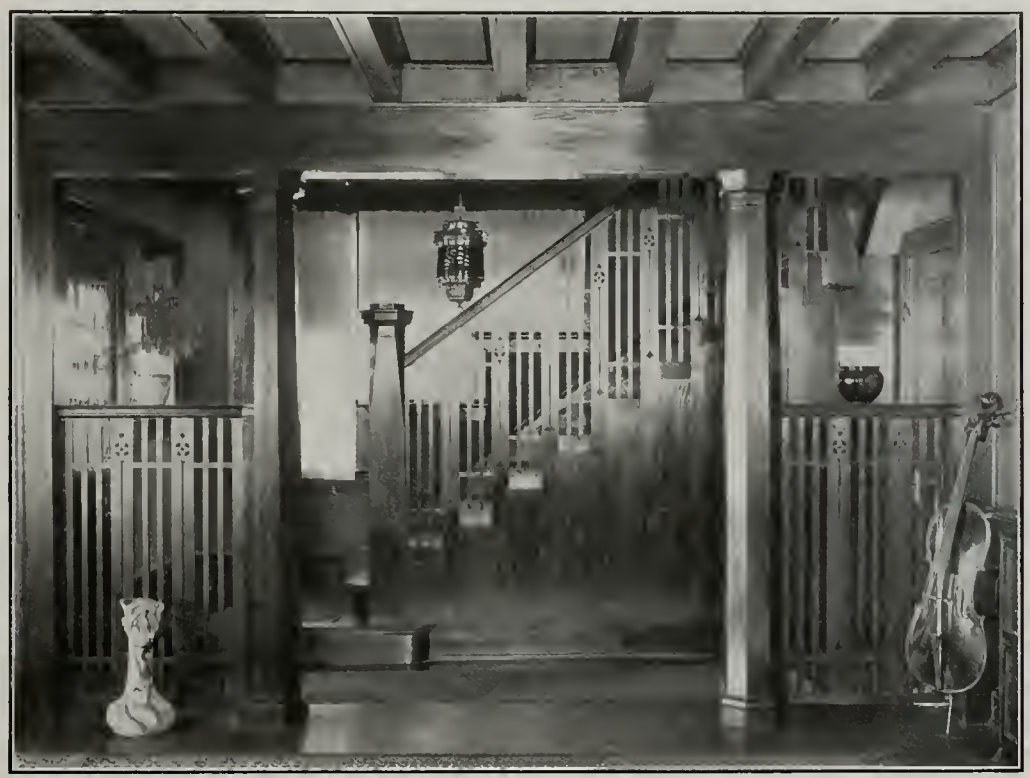
Living Room, Country Residence for Mr. C. H. Clarke
Willatzen & Byrne, Architects, Seattle, Wash.



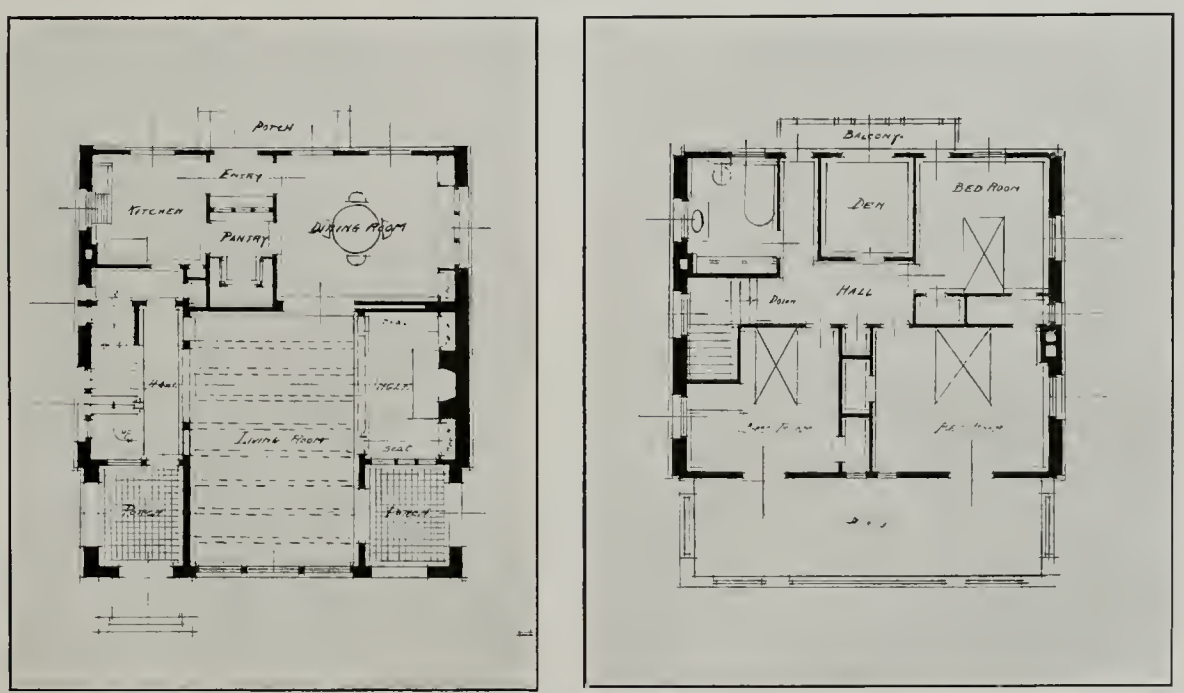
Second Floor Plan, Country Residence for Mr. C. H. Clarke
Willatzen & Byrne, Architects, Seattle Wash.

Front Elevation, Residence for Mr. Clayton D. Wilson
Wilson & Loveless, Architects, Seattle, Wash.

Rear Elevation, Residence for Mr. Clayton D. Wilson
Wilson & Loveless, Architects, Seattle, Wash.

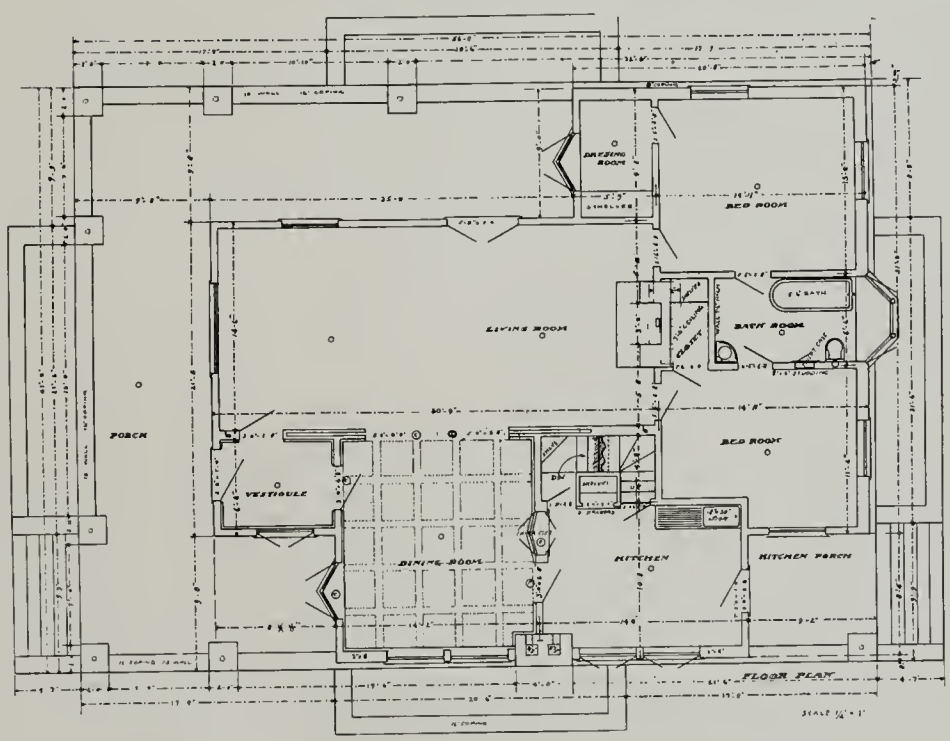


Hall, Residence for Mr. Clayton D. Wilson
Wilson & Loveless, Architects, Seattle, Wash.



First and Second Floor Plans. Residence for Mr. Clayton D. Wilson
Wilson & Loveless, Architects, Seattle, Wash.

Front Elevation, Bungalow for Mr. George W Fox
Hyslop & Wescott, Architects, Spokane, Wash



Floor Plan, Bungalow for Mr. George W. Fox
Hyslop & Wescott, Architects, Spokane, Wash.

OUR ILLUSTRATIONS

The Glyn Building, Vancouver, B. C.

The Glynn Building is to be a ten-story reinforced concrete office building, to be built on the corner of Granville and Pender and adjoining the Canadian Bank of Commerce, Vancouver, B. C., for Jonathan Rodgers. The ground floor will contain stores with entrances to the offices above from each street with four passenger elevators.

The building will be thoroughly modern throughout. The exterior will be of pink Tennessee marble and ivory or cream white terra cotta face, for the rest of the structure, matt or semi-clay. The cost will be about half a million. Mr. Rodgers and Architect Gould are now abroad. Gould & Company, of Seattle, are the architects.

Residence of Mr. Fred Phair, Spokane

The residence of Mr. Fred Phair, Spokane, is particularly well built as well as attractive in appearance. The interior basement walls are brick. Exterior basement is vitrified brick. The basement floor is cement, with the exception of the billiard room and hall, which are maple. The first story floors are oak. The exterior walls are studded, then sheathed with shiplap, then covered with Cabot's quilt, then finished with 1 in. by 2 in. strips, sheathed again with shiplap which is covered with heavy waterproof paper and cedar clapboards.

Heating plant is Broomil vapor system. The servants' bathroom is located on the third floor. Clarence Z. Hubbell, Spokane, is the architect.

Residence of Mr. C. D. Wilson, West Seattle

The house stands near the edge of a bluff from which there is an extended view of Puget Sound and the Olympic range of mountains. For this reason the end of the living room is given a large area of window surface. The porch at the side of living room is screened for summer use and is used as a conservatory in the winter. French windows open into it from the living room. The arrangement of stair hall, ingle nook and living room give an unusually spacious effect to the interior. The coat closet is located off the passage between hall and kitchen. The rear entry has space for a refrigerator. Under one of the seats in ingle nook is a dumb waiter for hoisting wood and coal direct from cellar, a convenience that most housekeepers will appreciate. The second floor has three bed rooms and a den, and a balcony opening from the hall, which serves as a place to air bedding. Across the entire front of second story is an open porch from which a magnificent view is obtainable. French windows open on this porch from the two front bed rooms.

The exterior of the house has two brick gables, built of paving brick, which varies in color from chocolate to light red, laid with a wide joint. The sides are of Stucco on wire lath of a warm gray, while the timber work is brown. The shingled roof is a soft green. The entrance front is given a symmetrical treatment and is more severe than the garden front, which is treated in a rather playful manner.

The interior woodwork is all Washington fir, stained. The panelling of the hallway extends up the side of the stairs, the stiles of the panels being perforated. Wilson & Loveless, Seattle, are the architects.

Circle A, Portland's New Club

The launching of Circle A adds another organization to Portland's Clubdom. The purpose of the Club is to reach certain classes of professional men through the field of fine or applied arts. Circle A Club is primarily an organization of designers. Only two months old, the organization covers the artistic field very thoroughly. This field includes commercial designers, engravers, etchers, jewelery, chandelier, art glass and furniture designers, newspaper illustrators, magazine artists, professional painters, some of more than local reputation, interior decorators, several sculptors and architects.

Following its organization the Club established quarters at 406 Labbe Building, and proceeded to make them inhabitable through the generosity of several of the material supply firms, and the personal work of the members. Timms, Cress & Co. furnished the kalsomine; "Duresco" donated by Fisher, Thorsen & Co. for the walls; "Neponset" given by F. T. Crowe & Co. for the floor, made the quarters begin to assume a homelike air. Chandeliers donated by Swetland & Son were re-arranged to J. C. English & Co.

The Club made its initial bow with an exhibition of water colors by Mr. A. Disi, of Rome, which was held in the Club rooms a fortnight ago, and was commented upon as being one of the finest displays of its kind ever seen in Portland. At the present time there is an exhibition in the Club quarters of the oils and water colors of Mr. C. C. McKim, of New England. Mr. McKim is a younger painter of the American Impressionistic School. This style of painting is the one which awoke Europe to the realization that America has a vigorous and a National art. An exhibition of commercial art will be opened on the 19th of May, and will consist of the best work which Portland's commercial artists are doing. Immediately following will be an exhibition on the "House Beautiful." It will open the first week of the Rose Festival and continue for two weeks. All people connected in this line of endeavor are cordially invited to participate in the exhibition. Information concerning the exhibition can be had from Val Deveroux, 416 Couch Building.

The Club is conducting a splendid life class twice a month, where some promising work is being accomplished. It is also conducting a Sunday out-door sketch class. The officers of the Club are: Val Deveroux, President; Lute Pease, 1st Vice-President; H. F. Wentz, 2nd Vice-President; Geo. O'Brien, Secretary; W. H. Blevens, Asst. Secretary; J. Juopo, Treasurer; C. J. Fulton, Fred Routledge, Chr. Pafil, J. C. Miles and R. W. Carey, Executive Committee.

Programs for State Capitol Competition

At a recent meeting of the Capitol Commission of Washington, and Advisory Architect C. H. Bebb, the program for the competition for a proposed architectural plan for the capitol group of buildings and the new "Temple of Justice," to be the first of the group, was formally adopted following for a few minor changes.

The call for plans will be made and the program for the competition will be forwarded upon application. The time for the closing of the competition has been extended from July first to the twenty-seventh, the Judges to proceed with the examination on the following day.

The prizes and awards will be made according to the rules of the American Institute of Architects. The first award will be made for the design and supervision of the Temple of Justice. The other awards are: Second, $1000; third, $750; fourth, $600, and fifth, $500.

Decorative Fabrics

BY JENNIE M. MORTON.

All through the centuries decoration has followed architecture, and the subject of furnishing and decoration, though of real interest to the architect, is too often left entirely to the client, who, being at a loss how to proceed, sometimes loses time and results by taking indiscriminate advice.

The necessity thus created has been taken advantage of by the big decorative departments, who now engage experienced decorators and salesmen, qualified in every way to carry out in every detail any scheme of decoration best suited to the architectural conditions, whether in the elaborate period styles, or the more modern and simple treatments.

Of no small importance is the initial question of selection, which the purchasing department has been careful to put into the hands of men who understand and appreciate the artistic as well as the commercial value of the market.

Both interesting and educational are the new things to be found in artistic fabrics for wall coverings, draperies and upholstery. So faithfully have the old designs been copied, and so masterly the technique, that one can now enjoy the luxuriant richness of the Italian Renaissance or the delicately elaborate designs of the French, not only in expensive materials, but also in the cheaper fabrics, which are within the reach of almost everyone.

Many of the tapestries are reproductions from the historical royal manufactories of the Gobelins, Beauvais and Aubusson.

A number of gorgeous examples of Broderies, Venetian and Florentine are shown. These have brilliant touches of color, interwoven with thread of gold on neutral ground of silk. Other combinations of jute and silk, delightful for wall coverings, come in two-toned fabrics, reproductions of beautiful old designs, at an extremely low price. Of these some of the finest are in Venetian Broderies, but it is the novel technique more than the color and design that gives the wonderfully rich result.

Many designs are to be had in silk brocade of Louis IV., V. and VI., for wall hangings and upholstery. There are also some rare examples of Toile de Jouy in design and color very like the old.

Beautiful combinations are presented for wall and draperies, and it is now not so much a matter of expense as of careful planning to secure an harmonious and consistent whole.

Portland Stands Fifth in National Building Record

Figures giving building construction throughout the country for the first quarter of 1911 place Portland in fifth place with a total of nearly $5,000,000. Leading, in the order named, is New York, Chicago, Philadelphia, Los Angeles and Portland.

It is almost unbelievable to the average Easterner and a source of great pride to Portlanders that for a year past this city has beaten such centers of population as St. Louis, Baltimore, Boston, Washington, Cincinnati, Cleveland and New Orleans. The record shows that during every month of 1910, Portland's building activity exceeded all of those cities. In January and February of this year Portland continued to maintain its lead over these cities in the half million class, but by some strange spurt both Boston and Chicago jumped ahead of Portland in March, forcing it down to seventh place. San Francisco also exceeded Portland by $2000 in March, but for the year, so far, Portland is ahead of the California metropolis by more than a million dollars.

That the four large Coast cities, San Francisco, Los Angeles, Portland and Seattle, should regularly, month after month, eclipse Eastern and Middle Western cities, is an index to the fine sample of prosperity and the general upward movement and progress of the three Coast States.

The progress of the entire Pacific Coast is a source of pride to every individual on this side of the Continent, and it is extremely regrettable that such evidences of jealousy are allowed to exist as now and then crop out in Los Angeles and Seattle newspapers.

Speaking of these little jealousies, "Facts and Comment," in the *Los Angeles Times*, had the following to say in a late issue of that paper: "The proper attitude of the West Coast man toward the West Coast was admirably expressed last week by the manager of two of the great hotels of the Northwest, who, in discussing the knocking that is sometimes to be seen in the relationship of different cities, spoke as follows:

"'The hotel men of the Pacific Coast are setting a good example to the many other business and professional men. Instead of knocking each other, the bonifaces are quietly spreading the good word about the great and growing cities of the whole Coast, their attractions and their inducements to tourists and colonists. In this way they are helping to instill confidence in the Easterner and furthering a much needed system, that of community help.'"

Building Firms to have Exhibit

A permanent building material exposition is being planned by the members of the Spokane Builders' Exchange. Every building material house in Spokane and the Inland Empire is expected to maintain a display, showing samples of their goods, and to keep the display up to date, in the quarters of the Builders' Exchange on the seventh floor of the Hutton Building.

Contractors and builders will be able to visit the rooms of the Exchange and inspect the wares of all the different concerns represented in Spokane, and will be saved the trouble of visiting a score of separate offices.

It is planned to establish regular Exchange hours, when the companies having exhibits in the room will be allowed to have representatives present to explain the merits of their goods to all visitors. The Exchange will probably be open in this manner from 11 o'clock until 1 o'clock each day. At other hours of the day material men may bring customers up to inspect their goods, but will not be expected to keep a representative in the room.

Bids are being received by Earl Constantine, Secretary, for the necessary shelving and cases for holding the exhibits. These cases will be built much after the plan of sectional bookcases and space will be rented out to the various material men for their exhibits.

No large advertisements will be allowed and the only indication of the owner of the exhibit will be a neat name plate, and these name plates will be uniform in shape and style. A small space in the shelves may be reserved for advertising literature.

Exhibits will be made of brick, terra cotta, sand, lime, cement, patent plasters, metal lath, fancy finishing lumber, and, in fact, everything used in construction work will be on exhibition in the hall.

M. L. Kline in Trouble

The Portland plumbers' trust is accused by Louis F. Brayton, Portland manager for the Stone & Webster Engineering Corporation, of conspiring to delay construction of the Wilcox Building, which is now under way at Sixth and Washington streets.

Mr. Brayton has instructed the attorney for his company to begin the preparation of a suit against M. L. Kline, a member of the alleged trust, to compel fulfillment of a contract to supply plumbing material and fixtures to Stone & Webster. Heavy damages are asked, and a dozen master plumbers are made parties defendant to the suit.

Trouble for Stone & Webster arose from the fact that they undertook to do their own plumbing instead of subletting the contract. Although they have a contract with M. L. Kline, alleges Manager Brayton, Kline has refused to supply the material. It is alleged that Kline was formerly under boycott by the Portland Master Plumbers' Association and that the boycott was removed with the condition that he would refuse to furnish material to Stone & Webster. Kline has fulfilled his part of the contract.

"This situation has been forced on us," said Mr. Brayton. "We are determined that the Wilcox Building shall be erected, and that it shall be completed on time. We are working under State and United States laws and do not propose that any local plumbers' association shall fix conditions under which we shall operate."

Development of the controversy with Kline up to the point where Kline refused to furnish further material to the contracting company is shown in Brayton's daily notes. The following was written under date of April 28:

I met Mr. Kline by appointment at his office. I talked to him in the presence of Mr. Follett, his assistant manager. We discussed the order which we had placed with him for the plumbing fixtures for the T. B. Wilcox Building. I told Mr. Kline and Mr. Follett most emphatically that in spite of any objections of the plumbers we were going right ahead with the plumbing in the Wilcox Building, and that we would expect him to furnish the fixtures. He said that he would like to furnish us all the material on the Wilcox Building but that unfortunately if he furnished us the goods as the conditions stood it would place us in an unfortunate position with the Master Plumbers' Association.

I showed him a letter from the Crane Company in which they stated that if we would open a plumbing shop they would be pleased to sell us anything that we wanted. He assured me he would do the same thing. I told him that I had already made arrangements to open a plumbing shop at 246 Second street, and that I was advising Crane Company accordingly. He made several suggestions as to how I should word the letter to Crane Company, and made the following remark: "I guess, Brayton, between the two of us, we can pay for your sign over the door." I declined his offer with thanks.

Mr. Kline told me that he believed that the Crane Company was back of the stand which the master plumbers were taking, as he (Kline) had been getting more of our business than had the Crane Company. As he expressed it, "It is bread and butter to Nitchy." I told him that so far as any record we had was concerned, Mr. Nitchy seemed perfectly willing to sell us goods so long as we would establish a shop.

Mr. Kline said that there had already been a master plumbers' meeting to consider the case of Stone & Webster, but that the meeting was packed by Crane's plumbers, and he (Kline) did not let the meeting come to a head.

In the following notes Mr. Brayton shows his inability to get bids from the various plumbing supply houses:

April 29—Mr. Barrow, of the Crane Company, called for the bill of material today as requested in our letter of yesterday. We notified Kline and the Gauld Company by telephone that our bill of material was ready for figures and that the figures would be due at 10 o'clock Tuesday morning.

May 1—The Gauld Company was notified by telephone to get out bill of material, but Mr. Kline notified us that he was too busy to figure at the present time.

May 2—No figures from any of the jobbers came in today, although they were due at 10 this morning. The master plumbers held a meeting but according to Mr. Kline's report to us nothing was accomplished on account of it not being a full meeting, although the question of whether the master plumbers would permit Kline to sell us plumbing fixtures was discussed.

Under date of May 3, Mr. Brayton noted that a bid on piping and fittings had been received from the Crane Company, but there was no bid from the Gauld Company. He called up Mr. Kline, who objected at first, saying the Gauld Company was making a play "with the master plumbers to get him in wrong." When he learned that the Crane Company had sent a bid he promised to send in one.

May 4 Mr. Brayton noted that the figures from Kline had not been received and that he had called up the establishment of Kline and given him 15 minutes to send in the figures so they would be received before the meeting of the Master Plumbers' Association that afternoon. No figures were sent. Under the same date, Mr. Brayton continues:

I understand that at the plumbers' meeting today Mr. Kline was notified that he had been under boycott for the past year, and that an understanding was arranged between Mr. Kline and the plumbers' Executive Board by which this boycott would be removed from Kline, provided he would decline to supply the fixtures to the Stone & Webster Engineering Corporation. In other words, the master plumbers and Kline entered into an agreement the effect of which would be to delay the Wilcox Building and injure the reputation of the Stone & Webster Engineering Corporation.

Mr. Brayton's diary under date of May 8 shows that an order was placed with Kline for a bill of plumbing material to be delivered at the Stone & Webster plumbing shop at 246 Second street, the object being to compel Kline to take a stand. Next day it is noted that the order was refused and that Kline returned copy of Stone & Webster's contract, also requisitions, with the announcement that none of the orders would be filled. It was also noted that the Crane Company had filled an order given by Mr. Brayton, delivering the material.

Registered letters were sent by Mr. Brayton to the following members of the Master Plumbers' Association notifying them that they would be held jointly responsible with M. L. Kline in the suit to be instituted: George Connolly, President of the Association; George Doughty, Manager of the Hassalo Engineering Company; J. F. Lynds, Sam Murhard and William Muirhead, of Muirhead & Murhard; P. J. Melis, Fred Rosenau, of Rosenau & Schneller; T. J. Rowe, Otto Wacknow, J. R. Widmer and A. G. Rushlight.

Among the Architects

Lewis I. Thompson has moved to 520 Yeon Building.

Goodrich & Goodrich have moved to 1008 Yeon Building.

Arthur J. Maclure, formerly located at Los Angeles and San Francisco, has opened an office at 408 Lewis Building.

W. B. Bell has taken larger quarters at 633-34 Worcester Building.

George Ray, architect and structural engineer, has associated himself with W. B. Bell at 633-34 Worcester Building.

H. H. James, formerly located at Spokane, has opened offices at 701 Board of Trade Building.

Cutter & Malmgren, of Spokane, have moved from the Exchange Bank Building to the Western Union Life Insurance Building.

R. C. Sweatt has moved from the Peyton Building to 416 Realty Building.

H. G. Ellis, of Spokane, has moved from the Paulson Building to 415 Realty Building.

Alfred Jones, of Spokane, is making an extended trip through Mexico and will not return until about June 15th.

J. N. Goodwin has been appointed Building Inspector of Spokane.

Clarence Z. Hubbell, of Spokane, has moved from the Hutton to the Jones building.

John F. Cody, of Spokane, has received his appointment as Building Inspector at Boise, Idaho.

Sabro Ozasa, of Seattle, has moved from the Central Building to the Oriental Trading Co. Mr. Ozasa has been commissioned to prepare the plans for a $100,000 hotel at Tokio, Japan, and will leave for there soon.

Thomas L. West, formerly located at 911 White Building, Seattle, has located at 216 Farmers' & Fruit Growers' Building, Medford, Oregon.

Waine L. Mills has become associated with W. F. Tobey at 220 Sherlock Building.

Gibson & Cahill have withdrawn from the erection of the Multnomah Hotel. H. Henselman is now in charge.

Harold H. Gennold, formerly with C. Lewis Wilson, of Chehalis, is now located at 661 Empire Building, Seattle.

Allan B. Stroud, of Stroud & Keith, Architects, 414 Cotton Building, Vancouver, B. C., was a recent visitor to Portland.

Johnson & Mayer, formerly located in New York, is a firm of local architects which has opened offices in the Selling Building.

Architects Gibson & Cahill have dissolved partnership. Mr. Gibson is going to Alaska, while Mr. Cahill expects to return to practice in San Francisco.

R. E. Heine, local representatives for Reid Bros., San Francisco, has returned from a trip to that place.

W. A. Carpenter, formerly practicing at Vancouver, Wash., has become associated with the H. M. Fancher Co., at 301 Henry Building.

O. L. Broline, formerly of Seattle and Chicago, has opened an architectural office at 1021 Board of Trade Building.

Architect H. Hanselmann, with headquarters at 621 Henry Building, has succeeded Gibson & Cahill on the Multnomah Hotel. Mr. Hanselmann was formerly with Schacht & Son, and comes here direct from Burnham's office.

McNeil & Wallwork are former Minneapolis architects who have located at 702 Swetland Building.

The O. W. M. Co., with G. C. Manning as Manager, are new architects and engineers, located at 510 Gerlinger Building.

The following are the officers and directors of the Spokane Architectural Club for the ensuing year: Julius A. Zittel, President; C. Z. Hubbell, Vice-President; F. P. Rooney, Treasurer; H. C. Whitehouse, Secretary. The Directors are Julius A. Zittel, L. L. Rand, F. P. Rooney, H. C. Whitehouse, C. Ferris White, C. Z. Hubbell and J. M. Goodwin.

Trade Notes

Mr. Luce, Second Vice-President of the Wells Bros. Co., contractors of New York and Chicago, was a recent visitor in Portland.

H. A. Noble, formerly connected with the local office of the Concrete Steel Products Co., has gone to Buffalo, New York, where he will have charge of that office for his company.

Exhibitors having space in the Builders' Exchange at Seattle have been notified to remove their displays owing to lack of interest.

W. H. Denny & Son, of Seattle, have moved from 707 White Building to 421 Northern Bank Building.

The Lake Union Brick Co., of Seattle, is adding six tunnels to their drier so as to enable them to increase their daily capacity to 36,000.

The C. Ellison Parker Co., interior and architectural decorators, and formerly of New York, are located at 1928-30 Second Avenue, Seattle, where they are carrying exclusive designs in both antique and modern furniture, carpets, rugs, wall papers, draperies and tapestries. They make a specialty of planning interior work and decorations.

Fred C. Cook, representing the Kawneer system, has moved from the Wells-Fargo Building to 510 Lewis Building.

Victor S. Persons, of the Concrete Steel Products Co., is making an extended business trip to Seattle and Vancouver, B. C.

S. F. Cooke, local Manager of the Holmes Disappearing Beds, has just completed the installation of 88 beds in the Hendricks Apartments, 11th and College Streets, and the Dekum Apartments, 20th and Washington Streets.

The Dallas Brick & Tile Co. is the name of a new Oregon industry, with G. M. Partridge as Manager. They are now constructing their first kiln.

E. D. Timms has been spending some time at Collins' Mineral Springs for his health.

Alex Gordon is local agent for "Anaglypya" high relief ceilings, friezes and wainscots, manufactured by the W. H. S. Lloyd Co., of New York.

Dr. J. R. Wetherbee is representing Portland at the National City Builders' Convention being held in Philadelphia.

Abstract of a Paper Delivered by J. F. Stevens before the Oregon Society of Engineers

(A paper by Mr. Stevens on the Cost of Operation of the Canal will appear in an early issue.)

The Act of Congress which authorized the President to proceed with the construction of the canal, placed almost unlimited power in his hands as to details of route, type and size of canal, the chief limiting clause which, it may be noted, leaves much to his judgment, reading as follows: "The canal shall be of sufficient capacity and depth as shall afford convenient passage for vessels of the largest tonnage and greatest draft now in use and such as may be reasonably anticipated."

In order to obtain the advantages of the best engineering advice upon the many general problems involved, the President appointed a Board of Consulting Engineers, the members being eminent in their profession, both American and European. After a visit of inspection to the Isthmus and due consideration, the Board made two reports, the majority one favoring a sea-level and the minority a lock plan, both reports, however, concurring in the other general features. After a long time, the whole matter was referred to Congress, which, after examinations and debates, voted in favor of the minority, or lock-level plan—the one under which work is now being prosecuted.

It would require much more space than is now available to sum up even the various reasons which I believe justified the final decision in favor of the lock canal. I went to the Isthmus as Chief Engineer, rather in favor of a sea-level plan, which I abandoned after personal study of the conditions. As I had reason to believe my influence was quite potent in the decision, I feel that this one service to the country is enough for a lifetime, in helping to save the fatal consequences of a wrong conclusion, as I know a decision in favor of a sea-level canal would have been.

An extract from a report to the Canal Commission, under date of January 26, 1909, expresses in brief my position: "The sum of my conclusions is, therefore, that all things considered, the lock or high level canal is preferable to the sea-level type, so called, for the following reasons: It will provide a safe and quicker passage for ships, and therefore will be of greater capacity. It will provide, beyond question, the best solution of the vital problem of how safely to care for the flood waters of the Chagres and other steamers. Provision is made for enlarging its capacity to almost any extent at very much less expense of time and money than can be provided for by any sea-level plan. Its cost of operation, maintenance, and fixed charges will be very much less than any sea-level canal. The time and cost of its construction will be not more than one-half that of a canal of the sea-level type. The element of time might become, in case of war, actual or threatened, one of such importance that, measured not by years, but by months or even days, the entire cost of the canal would seem trivial in comparison. Finally, even at the same cost in time and money for each type, I would favor the adoption of the high-level lock canal plan in preference to that of the proposed sea-level canal. I therefore recommend the adoption of the plan for an eight-five-foot summit-level lock canal, as set forth in the minority report of the Consulting Board of Engineers. Very respectfully, Jno. F. Stevens, Chief Engineer."

To go back to the time when the United States took formal possession by purchase from the French company and by treaty with Panama. This commission, appointed by the President to supervise the work, proceeded to the Isthmus, began work of organization of the preliminaries, and the thousand and one details naturally pertaining to such an enterprise received under such conditions, in a tropical climate—and the mention of the latter condition brings up directly to the underlying important feature of sanitation, and the consequent good health of employes, without which nothing but failure would result.

Probably no spot on earth previous to the year 1906 had—and it largely deserved it—a worse reputation for diseases of various kinds, than Panama. It will never be known how many employes lost their lives during the French occupancy. Very little was known of modern sanitation, at least very little was practiced by them, and even if their finances had held out, it is probable that death and disease would have conquered them in the end. But by the knowledge our army medical men had gained in Cuba as to the true cause and means of preventing yellow fever, that white man's scourge of the tropics has been eliminated, and the percentage of malaria and malarial fevers has been reduced more than one-half. Colon, at the northern, and Panama, at the southern, terminus of the canal, were, up to 1907, two of the most forbidding, dirtiest places on earth. Today, they are and have been for more than four years past, especially Panama, cleaner and more sanitary than the average American city; paved throughout, provided with modern sewerage and water systems, they are at once a tribute to the energy and intelligence of those Americans who made them possible, and a standing reproach to those Americans who for the sake of a little printed notoricty have so far prostituted themselves as to send forth to the world statements which were not only false, but palpably known by themselves to be false when issued.

Recently I have noticed in the local newspapers very flattering comments on the present conditions as regards streets, sewers, and water supply in Colon and Panama.

These are all true, but I want to remark, in justice to the engineers in civil life who designated and built these works and wrought these changes, that all this was done prior to the advent of the army engineers, and was not done by the latter, as stated by the articles of the press to which I have referred.

This work of sanitation and municipal improvement in the two cities has cost the United States a very large amount of money, which the treaty provides shall be repaid after a long term of years, and there is reasonable probability we shall be repaid, but if we are not, the value of this work to us will be four-fold of all it cost, in the health and life of our employes.

The length of the proposed canal from deep water to deep water, will be about 50 miles, the width varying, as below, these widths as noted being at the extreme bottom of the canal sections.

From the Carribean sea, near Colon, 1,000 ft. for about 7 miles to Gatun dam and locks; from Gatun locks a minimum width of 1000 feet through Gatun lake (to be formed by Gatun dam) over a distance of about 26 miles; thence about 2 miles of a width of 500 ft. to the north end of Culebra cut, then 300 ft. wide for about 9 miles, to the locks of Pedro Miguel, the south end of Culebra cut; then through Lake Sosa, some 5 miles, 1,000 ft. minimum width, to the locks of La Boca; then 3 miles to deep water in the Pacific Ocean with a width of 1,000 ft.

These dimensions are given in some detail, as showing, from their generous proportions, that a fair rate of speed can at all places be maintained by the ships while passing through the canal, excepting through the locks proper, which comprise but an insignificant portion of the entire distance.

A modification of the plans for the locks and dams near the southern end of the canal has been made, which will be referred to later on.

A brief study of the map will show that owing to the peculiar twist of the Isthmus near its narrowest part, the actual direction of the canal is not east and west, as popularly supposed, but northwest at the Atlantic end, to southeast at the Pacific end, and that in fact Panama on the Pacific side is 22 miles east of Colon on the Atlantic side, so that the use of the terms north and south of the canal is entirely proper.

In formulating the plan for any canal at Panama the one great overshadowing engineering problem that had to be solved before success could be expected was the control of the flood waters of the Chagres river and its large tributaries. This river, rising in the mountains of the Darien country some 100 miles east of the canal, flows almost directly west, thence by an abrupt turn its course changes to the north and northwest, emptying into the Carribean sea about 5 miles west of Limon bay, in which the canal finds its northern terminus. Thus, for nearly thirty miles the canal follows the valley of the Chagres river—a stream which fluctuates in the dry season from a flow of 600 to nearly 110,000 cubic feet per second in the rainy season.

At several points along this part of the river the valley narrows in, and at one point (Gatun) it is less than 1½ miles in width, at an elevation of 100 ft. above sea level, and it is at this point suitable foundations have been found to exist, the gigantic works known as the Gatun locks and dam were projected, and are now under course of construction. The dam is to be of earth, will be about 7,800 ft. long by 100 ft. in width on top, and 1½ miles wide, or thick, at the bottom. It will be 135 ft. high, and will contain approrimately 22,000,000 cubic yards of material, the greater part of which will be placed by powerful hydraulic pumps, thus insuring solidity of construction that only nature under favorable conditions can rival. This material will be clay, with a very slight mixture of fine sand—an ideal material, to produce, so placed, a mass comparable only to a mountain—one that will resist water, decay, earthquake, or any known force of nature or man, within imaginable limits.

The truly enormous proportions of this dam were a concession, and a lame one, by the commission to the fancied criticisms of the public as to the stability of a strictly earthen dam. It was my intention always to at the proper time reduce the section of the dam to a reasonable limit, and I am pleased to know it has been done, and the fact remains that even now, as being built, it has a very large factor of safety, and will still contain a mere trifle —only about 17,000,000 cubic yards of material.

This dam will, by closing up the valley of the Chagres river, form a lake of some 30 odd miles in length, as measured by the main valley, and covering approximately an area of 140 square miles—really a vast inland fresh-water sea; the elevation of the water being at normal 85 feet above mean sea level, this water above the dam and the sea-level waters of the Atlantic ocean will be brought to the locks by the seven miles of open, 1000-feet-wide channel mentioned above. On the other very high ground, nearly in the center of the dam, will be constructed the necessary regulating works by which the height of the water in the lake will be controlled, storing it up for the dry, and allowing it to flow gradually away during the flood periods, as conditions may require.

These regulating works, and main locks, also, will rest their entire length and breadth on rock—not earth, not mud, but rock, really a species of sand rock sufficiently hard to insure first-class foundations, and to set at rest all fears of the stability of the works. That the character of these foundations is first class was known long ago to the people directly responsible for them, and has been amply proven by numerous borings and test pits, but to satisfy a senseless clamor set up and encouraged by the ignorant critics, the Secretary of War—in whose hands, next to the President, is the general direction of all canal affairs—took a committee of three of the best known and ablest of our American engineers last year to Gatun. These gentlemen, after a thorough personal examination, concurred in a report which fully confirmed all the previous ones of the chief engineer, and which should have settled for all time the question raised; but very recently the commission has given out the statement —quite superfluous—that additional borings have been made, and that rock exists everywhere under the proposed locks, and a splendid foundation is assured—another case of the Dutch taking Holland.

The earthen dam will rest on a stratum of impervious clay, nearly 200 feet thick, lying on the same kind of rock that the locks will rest upon. Altogether, the foundations of both locks and dams are ideal, and all notion to the contrary can be dismissed from the mind.

The control of the flood waters of the Chagres is simple, and the plan can be easily understood by anyone, whether engineer or not. It is merely accomplished by the formation of a lake, into which the flood waters will pour, at such distances from the sailing line of ships that these flood waters can be entirely ignored.

Leaving the lake, the line of the canal enters the famous Culebra cut, which will be about nine miles in length, and is directly through the backbone of the Cordilleras, and the watershed between the Atlantic and Pacific oceans. The mountains along the line of the canal rise to an extreme height of some 120 feet above the sea, and probably it was from some of these peaks that Balboa first caught sight of the peaceful ocean, the waters of which ripple as calmly and which present a view at Panama that for loveliness is said to rival that of the Bay of Naples.

The bottom of the canal prism in the cut, allowing for the 40 feet of water, will then be 45 feet above sea level, the surface of the water being the same elevation as that of Gatun lake, or plus 85. At the highest point the top of the cut was originally some 280 feet above the bottom, but the French dug away some 120 feet, and now in depth there are about 120 feet yet to go down. This figure, however, does not adequately express the relative amount of work to be done. When the United Staes assumed charge of the enterprise changes in line, increases in width, a more proper adjustment of slopes, and so forth, which were made, all contributed to swell the total yardage to be moved. An approximate summary of the various items showed about 70,000,000 cubic yards of excavation to be taken from the prism in Culebra cut, of which probably 80 per cent is rock, of different degrees of hardness, and this vast amount of material was not to be dug out and placed in waste banks immediately alongside of the excavation, but the greater part must be hauled miles by railway trains to find room for disposal.

The work of drilling, of loosening up by blasting ready for the big steam shovels, while appalling, was only one feature. Hundreds of miles of track must be laid, locomotives by the hundred, cars by the thousand, and all the myriad special adjuncts of shops and machinery, requisites to repair and maintain—all such features had to be created, and when I reached the zone in July, 1905, I think I may truly say I faced about as discouraging a proposition as ever presented itself to a construction engineer.

Passing to the south end of Culebra cut, the locks and dam at Pedro Miguel are reached. Here, by duplicate locks, with a lift or drop of 30 feet, as the case may be, the change from the 85-foot level was to be made to the level of Lake Sosa, 55 feet above the level of mean tide in the Pacific ocean. The plan adopted in 1906 was to build two earthen dams at La Boca, near the shores of Panama bay, closing up the valley of the Rio Grande, in a manner precisely similar to the plan adopted at Gatun, thus forming a lake four miles in length, giving a minimum depth of 45 feet of water, with a sailing channel not less than 1000 feet in length. In Sosa mountain—an isolated rock butte—against which the dams were to rest, two locks in flight, in duplicate, each with a drop of 27½ feet, were to be constructed, thus delivering ships practically into a three-mile sea-level channel leading to deep water in Panama bay and the Pacific ocean.

Thus the waterway really was to consist of one stretch of canal; then of a long, wide, deep lake (Gatun), then throughout a channel (Culebra cut), of varying widths; then through a smaller lake, and finally through another channel into the waters of the Pacific ocean. This was practically the plan of the minority of the Consulting Board of Engineers, but was later modified to this extent:

It was decided to build the dam and locks at the southern terminus, some three and a half miles further inland, and thus to extend the sea level up and through what has been known as Lake Sosa. This—particularly if the press accounts are correct—is a wise move. For long months I fruitlessly sought by borings to discover suitable foundations for locks and dam at or near Miraflores, the point finally selected. Since that time, however, changes in the plans of the locks, having the effect of dropping the walls and the bottom of the same, have rendered sites available now for these works, that a year ago were not tenable, and, too, it is an open question if such changes in the lock plans, if not altogether unnecessary and questionable, have not added millions to their cost, far in excess of any saving in changes of location, and have not added to their efficiency, economy or safety of operation.

In regard to this change, the writer quotes from the same report made by him to the Canal Commission, referred to previously, as of date January 26, 1910: "As regards the plan and alignment of the canal at the Pacifc end, I am still inclined to my former expressed opinion that, on account of the military and sanitary features, the location of all the locks at Miraflores and Pedro Miguel, with the necessary dam at the same place, instead of part, will be found more satisfactory; but as the latter plan will cost about $6,000,000 less to construct than the former one, I am ready to waive my views in favor of the latter plan, although simply on account of the difference in the estimated cost," which goes to show that the matter was then seriously considered, and that "there is nothing new under the sun."

The first, or so-called Walker Commission, was unfortunate in many ways, which are immaterial here. The second commission, the one I had to do with, was more fortunate in its make-up, but it had its limitations. When I reached Panama in July, 1905, conditions could have been much worse, but they were bad enough. No real start at any effective work on the canal proper had been made, no adequate organization had been effected, sanitary reforms were really just beginning, little new plant had been provided and little that was absolutely necessary had been ordered. In the organization which existed no co-operation was apparent, and no systematic plans, as far as I could discover, had been formulated towards the carrying out of the work along lines promising any degree of success.

And, worse than all, over and above, in the diseased imagination of the disjointed force of white employes hovered the angel of death, in the shape of yellow fever, a number of cases of which were then prevailing, and from which several deaths had occurred. What many of the intelligent men seemed to expect was an order from Washington to abandon the work and go home. To provide housing for this army, to properly feed, to instill into it faith in the ultimate success of the work, to weed out the faint-hearted and incompetent, to create an organization fitting to undertake the tremendous work, and to fill its ranks with the proper material, was a task of heroic proportions. No one will ever know, no one can realize, the call on mind and body which was made upon a few for weary months, while all the necessary preliminary work was being planned and carried forward, and no attempt was, or could be, made to carry on actual construction until such preliminaries were well in hand. And the only gleams of light and encouragement were weekly arrivals of newspapers from the States, criticising and complaining because the dirt was not flying.

While the French turned over to us square miles of engines, cars, dredges, and tools of every description, very few of them were of any value and those that were used were only used until proper modern ones could be substituted, but as time wore on, as new plant arrived and was put in service, as proper food and housing were provided, as improved health conditions prevailed, as the majority saw that, unconsciously, perhaps, to them, a real effective organization, working steadily but surely towards a definite and intelligent end, had been made, the whole situation changed for the better; and that the organization was effective, the plant well designed, and all the preliminary work was fairly done is evident from the fact that the construction of the canal since the real beginning, with little addition to the plant already in hand or under order, or material change in organization, has gone steadily on, and in amount has surprised the friends and confounded the enemies of the enterprise.

I want here to express my confidence and appreciation for Colonel Goethals, and his corps of able assistants, who are in charge of this work. I have always had an admiration for our army engineers, and I am sure, if, as I have no doubt, the fighting arm of our country is equal in efficiency to the engineering arm, we will all be very proud at the results of whatever they may undertake, be it in war, or canal building.

Reference has been made to the importance of the Panama railroad to the work of construction; lying as it does immediately along the line of the canal, it affords the only practicable means for disposing of the millions of yards of waste material coming from Culebra cut. Huge systems of tracks have been planned and laid in the cut, on which are handled hundreds of work trains

loaded by the steam shovels with rock and earth, these systems of work tracks being connected at proper intervals with the main tracks of the Panama railroad, over which trains run to the dumping ground, or waste banks, some of the latter being 15 miles distant.

The rejuvenation of the Panama railroad was one of the hardest problems that had to be met in getting ready to push the canal construction. It had but a single track, practically no sidings, or station buildings, a worn-out telegraph line, no terminals worthy of the name and motive power and rolling stock that were obsolete 20 years before. While a fair amount of new equipment had been ordered, little or nothing had been done to place the road in proper shape to handle the heavy business thrown upon it. Traffic, both that pertaining to the coal and commercial, local and through, was nearly at a standstill, thousands of tons of freight were piled in cars, warehouses, and docks, and some of these shipments had lain from three months to a year and a half in the hands of the railroad company, and in many cases even the shipping papers and records of this freight had been lost.

All these congested conditions had to be cleaned up, the road rebuilt, reorganized in its operating features and personnel, taking care at the same time of a constantly increasing traffic. All this was acomplished, so that the Panama railroad in 1907 was placed in a condition, both from a physical and operating standpoint, fit to compare favorably with the average of our best American roads.

The creation of Lake Gatun necessitated the relocation and rebuilding of some forty miles of the railroad, to place it above the lake level, which work is already under way, and will be completed before the work on the canal proper is done. Meanwhile the road is handling the canal business as well as the commercial business; the latter was, however, badly handicaped by the very inefficient service of the Pacific Mail Steamship Company, whose ships formed the connecting link between it, at Panama, San Francisco, and the various ports of call along the Central American and Mexican coast.

Early in 1895 I went on record before congressional committees that the work should be done, and the canal opened by January 1, 1915, and I still hold this opinion. As before stated, the limiting factors are Gatun locks and Culebra cut. No night work has yet been done at either place.

New Lien Precedent is Set

That sub-contractors are entitled under the State law to prosecute mechanics' lien cases either within 30 days after the material is furnished or within 30 days after the work involved is completed, was a ruling made by Judge Gantenbein, establishing a new precedent in local law practice. It was previously believed that the law permitted sub-contractors to file their suits only after the work was done, but Judge Gantenbein ruled that sub-contractors had an advantage over the original contractors in being able to sue also within 30 days after material is furnished.

The suit that brought out the ruling of the court was that of R. A. Hume against Edward Ryan & Son, involving the repair of the Chamber of Commerce building. Hume was suing for $527.30, but a demurrer was entered by the defendants, who contended that he had brought suit before the time in which he was entitled to do so. Judge Gantenbein overruled this demurrer.

German architects are making more and more use of glass bricks in cases where walls instead of windows are essential, while light must be provided.

The Builders' Club

The Builders' Club has effected permanent organization and has elected the following officers and directors: E. B. White, President; E. E. Angell, Vice-President; L. F. Danforth, Secretary; F. W. Wagner, Treasurer; D. W. Ward, Thos. Muir, J. Ruedy, W. F. Blaesing, H. B. Loveridge, F. R. Jacobsen and G. E. Weaverson, Directors.

The club has leased permanent quarters at the northeast corner of Second and Alder streets, giving them an assembly room 47x95 and a smaller room 50x60. Space will be provided for the display of materials by the dealers. An Assistant Secretary and stenographer will be on duty to take care of the requirements of the members.

The Club has a membership of about 150 at the present time.

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The Editor will be pleased to consider contributions of interest to the readers of this publication. When payment for same is desired this fact should be stated. Self addressed envelopes must accompany all such contributions.

ADVERTISING RATES ON APPLICATION TELEPHONE MAIN 5121

Portland Continues to Build

Taking into consideration the condition of the money market throughout the country and the general retrenchment of building operations, Portland's building record for May is considered out of the ordinary. We question whether any other city in the United States will show a greater or even as great a percentage of increase in building permits.

The totals show a decided increase in the number of permits issued over May of last year. During the month 677 permits were issued at a value of $1,868,130, compared with 598 permits at a value of $1,803,445 for May, 1910.

"Shooting Up" a Building

Truly, the days of the "bad man" are passing. Not only has the law put a "crimp" in him, but now they are stealing the "vernacular" of his kind for trade purposes. No longer will "shooting up a place" refer only to a man with a gun, for now we are to have a man and a gun to "shoot up" our concrete walls.

Time is money, and putting up a forty-story steel structure in six months is too slow. An inventor has appeared who proposes to shoot walls into place with a rapid fire gun. It is claimed for the invention that it will accomplish as much in one day as the united efforts of twenty-four men by our present slow (?) methods. The cement gun is to succeed the cement mixer. No more will you see a procession of tired men wheeling loaded barrows. Instead liquid concrete is to be shot into place by means of compressed air.

Thomas A. Edison's prediction that cement was the means by which building construction would be revolutionized seems in a fair way to be realized. He planned building by filling giant molds. The inventor of the cement gun intends to fill these molds as fast and faster than they can be erected.

First, there is a long tube of sufficient textile strength to withstand the pressure of both compressed air and water; this is the gun barrel. There is a valve just forward of the breech of the gun and another near the muzzle. Compressed air is admitted through the first, and water through the second. At about the point of the vent in the ordinary breech-loading cannon a tube-like connection is established with a hopper, a wide-angled V-shaped affair.

Dry cement and sand are thrown into this hopper by two men, and here, aside from valve manipulation and directing the cement stream, the human element feature of cement gun operation ends. The hopper vibrates constantly, mixing its contents of cement and sand thoroughly before it drops down through the tube connection. Once in the gun barrel, the mixture is shot forward by the compressed air fed through the valve. At the muzzle a stream of water is encountered that does not check velocity, but mixes with the sand and cement, the whole being driven out of the gun end with sufficient force to carry it to the desired point.

Brayton Backs Water

The loudly heralded and threatened suit of Louis F. Brayton, representing the Stone & Webster Engineering Company, against M. L. Kline, noted in our last issue, has petered out. It was not a healthy firecracker, but merely a weak "squib." Mr. Brayton claimed that Mr. Kline was a member of the plumbers' trust and had refused to deliver plumbing supplies to his company for use in the Wilcox building, now in the course of construction.

The real facts in the matter seem to be that Mr. Brayton was dilatory in placing his order and when he attempted to secure his supplies Mr. Kline declined to tie himself up to a time contract. In a letter to Mr. Kline, under date of May 31, Mr. Brayton refers to the incident as a "pure misunderstanding." It would appear that Mr. Brayton neglected to look before he leaped.

Excuses for Non-Performance of Contract

That other sub-contractors, as well as the principal contractor, were prevented from completing the grading and construction of a railroad within the time required by their respective contracts, would not prevent the principal contractor from recovering damages of a particular sub-contractor for breach of his contract to complete his part of the work within the required time, caused by a fire damaging his equipment; the express words of the contract making time of the essence. Sands & Oliver vs. Quigg. Supreme Court of Appeals of Virginia. 69 Southeastern 440.

Clay Products As A Building Material

By S. GEIJSBEEK

The general tendency of builders is to build cheap, and the consequences are that material is used which appears to be cheap at first cost. Wood is the cheapest material which can be used for any building and, while it is cheap at first cost, it is the most expensive to keep up. It is astonishing to observe the ignorance of the people in general as to the comparative cost of building materials, and if a better knowledge was had, clay products would be used in many more buildings than is used at present.

Through the activity of the Building Brick Association of America, which was organized a few years ago by the clayworkers of this country to promote brick as a building material, more information can now be obtained regarding this matter.

A building built of clay products has many advantages which a wooden building never will show. A brick house is cooler in the summer and warmer in the winter than a frame house. Insurance in a brick house or building is less than in a frame structure, and the upkeep of a brick structure is nothing as compared to the upkeep of a frame building.

It is a proven fact, which many builders have to admit to their sorrow, that *a frame house reaches its prime as soon as the last carpenter and the last painter are out of the way.* After that time the house is on its downward path, and every year adds to the expense of keeping it in good repair.

With a brick house the matter is quite different for many reasons, and after it is built and *the brickmason finishes his job and walks away with his tools, he never comes back,* and the house increases in value every year as it gets older.

That the first cost of a brick house or building is not as prohibitive as many people may think is shown in the following tables, which were obtained by the Building Brick Association and are published by them in pamphlet form. The average bid was obtained from five bids, and the bidding was done on a two-story house.

Type Construction—	Av. Bid.	Excess over clapboard in Dollars.	Excess over clapboard in Pctg.
Clapboard	$6,759.95		
Shingle	6,868.80	$108.85	1.6
Stucco on Frame	6,952.90	192.95	2.9
Brick Veneer on Studding	7,153.98	394.03	5.8
Stucco on Hollow Block	7,187.65	427.70	6.3
Brick Veneer on Boarding	7,226.44	466.49	6.9
10-inch Brick Wall	7,372.48	612.53	9.1
Brick Veneer on Hollow Block	7,483.16	723.21	10.7
12-inch Brick Wall	7,641.00	881.05	13.0

Additional cost over frame construction:

Brick Veneer	Not over	5 per cent
Hollow Block	Not over	6 per cent
9-inch Brick Wall	Not over	8 per cent
12-inch Brick Wall	Not over	12 per cent

A close comparison of these facts is very interesting. Considering that the first four types of construction can still be classified as being frame construction, we find that there is only one-half of one per cent difference between a frame building and a fireproof building, even if we take that brick veneering on boarding is a frame construction, and we can build a hollow block building for six-tenths of one per cent less. The cost increases as we used heavy brick wall, but the general increase is only slight in comparison to the large increase we find in the cost of the different frame construction.

The conclusion reached from this data is that it is just as cheap to build a residence or building of hollow block, and plaster the same with stucco or cement, as it is to build a frame building. If we take into consideration that after two years the frame structure will have to be painted, and the hollow tile structure does not need any upkeep, it will be granted without much argument that this is the ideal type of future construction.

We have now pointed out the great value of hollow tile in construction work, but we should not neglect the other clay products, which are a valuable asset also. Burnt clay for building purposes is as old as the world itself. It has been used for every purpose known to mankind, and it cannot be compared with any other building material. There are no imitations of clay products; they are of a mineral substance which is found in all countries. They are formed, dried and given a burning process, by which they change their physical condition and after this process they will last forever.

Other materials are put on the market to compete with clay products, but they are, as a rule, the results of prepared materials which first have been subjected to a burning process, after which they are mixed again and cast into forms, and as they are not again subject to a burning process, they do not have that stability which is characteristic of clay.

Any building in which clay products have been used presents a pleasing appearance. A modern skyscraper, built of brick with steel frame, hollow tile construction face brick front with terra cotta trimmings and cornice, is certainly a masterpiece in which any architect who has designed the same has shown his artistic and technical genius, and which will stand as a monument for his name for all time to come. The building so constructed will last forever.

The cost of lumber has gone up considerably, while the cost of clay products has been steady on the same basis. Today the cost is even lower than it was a few years ago. In trying to build better buildings, we are very much encouraged nowadays by the assistance of the insurance companies. They have stepped down from the idea that a good fire department was the only thing necessary to maintain lower rates. They have built a laboratory in Chicago which they pronounce the best type of thoroughly fireproof building. Clay products were entirely used in the same. The insurance people point with pride to this "Underwriters' Laboratories Building." Residences, office buildings, warehouses, in fact, any building constructed along these same lines will be fireproof and a testimony that clay products are the best building materials.

In the Eastern and Middle West states clay products are, of course, more used than on the Pacific Coast, as there is the source of lumber and it is therefore so much cheaper. But these facts should not prove an argument for using less clay products and more lumber as a building material. It is not the first cost we ought to look at in building for permanency. If we were not building for permanency we would not have to build at all, for a canvas house or a tent would be all that would be necessary.

We build for permanency and for a safe investment, so that we get full return for the money spent in construction,

(Continued on Page 114)

The Spokane Architectural Club

The Spokane Architectural Club, which has been in existence since 1899, under date of June 6, 1911, filed articles of incorporation, and elected for its officers to serve the rest of the year the following men: President, Julius A. Zittel; vice-president, C. Z. Hubbell; secretary, H. C. Whitehouse, and treasurer, F. P. Rooney. The trustees elected are: Julius A. Zittel, K. G. Malmgren, L. L. Rand, H. C. Whitehouse, C. Z. Hubbell, F. P. Rooney and C. Ferris White.

The club has announced a series of lectures, and through the efforts of the educational committee, an interesting list of lectures has been outlined. The lectures are to cover "Achievements in the Field of Architecture." The subjects are as follows:

June 20—"Spokane Architecture and Its Future," Julius A. Zittel.

July 6—"City Buildings and Municipal Architecture," Commissioner C. M. Fassett.

July 18—"A Well Designed Home and Grounds," K. K. Cutter.

August 15—"Architecturally Designed Engineering Structures," City Engineer Morton Macartney.

August 29—"A Well Planned Modern City," Ernest V. Price.

September 7—"The Architect's Relation to His Client," H. C. Whitehouse.

September 19—"Interior Decoration," C. Ferris White.

October 2—"Church Architecture," R. C. Sweatt.

October 17—"Architecture in Venice," J. M. Goodwin.

October 31—"Training for the Profession of Architecture," W. F. Dolke, Jr.

The local newspapers have taken a great interest in the course and have promised to publish in full each lecture as it is given and also to illustrate them. This course of lectures has been formed primarily for the education of the public, and the Architectural Club is quite pleased with the results so far.

At a recent meeting of the club a committee was appointed to hand in recommendations for the establishment of a bureau of employment for draughtsmen. The club members feel that a great deal of good can be accomplished from this bureau, both for the draughtsmen and the architects. H. C. WHITEHOUSE, Secretary.

A New Brick Plant

According to the *Malheur County Enterprise*, Vale, Ore., is to have a large brick plant, to be established by Eastern capital. The *Enterprise* says: "The establishment of a $200,000 cement plant in Vale within the next few months is now almost assured. The business men of this city are ready to back up the promoters in the sum of $20,000 to $25,000 to show their faith in the future development of such an industry in this section. Banker M. G. Hope, who has been corresponding with the parties who want to put in the cement plant, yesterday wrote them that he had been instructed to notify them of the fact that Vale business men were with them heart and soul, and ready to give all financial aid needed, providing the promoters meant business.

"The plant will employ 200 men, who, with their families, will mean more than 1000 new people to the town. The plant is to be what is known as the Kiln plant. The hills east of the city abound with all the ingredients necessary for the making of Portland cement. Analysis of the native rock shows that the per cent of lime is strong, from 56 to 80 per cent."

Building Less In April

Decline All Over Country Shown by Statistics. Falling Off Small in Portland, and Total fur First Four Months of Year Shows Gain

Uncertainty in National politics and anticipated labor troubles in the large building centers are reasons given for the general decline in the statistics of the building record for the month of April. Official reports show an aggregate decrease for the month of about 17 per cent, as compared with the same month of the previous year. Most of the cities reporting show a loss of from 6 to 76 per cent and among them is included nearly all of the cities of the Pacific Coast.

While Portland suffered a loss for the month amounting to about 10 per cent compared with the figures for April last year, the total for the first four months of this year shows a gain of 14 per cent over the corresponding period of 1910.

New York showed a loss over the previous year of about 25 per cent; Philadelphia, 26; St. Louis, 25; Baltimore, 36. The following important gains are recorded: Dallas, Tex., 188 per cent; Manchester, 112; Worcester, 108; Knoxville, 92; Little Rock, 81; Detroit, 70; Toledo, 67; Salt Lake City, 39.

Los Angeles, Oakland, San Francisco, Seattle, Spokane and Tacoma all showed a decrease for the month. Salt Lake City showed a slight gain.

Particulars are found in the following table:

City—	April, 1911.	April, 1910.
Atlanta	$ 852,363	$ 1,111,177
Baltimore	1,138,777	1,802,310
Birmingham	197,690	367,128
Buffalo	918,000	875,000
Chattanooga	45,947	77,981
Chicago	8,581,100	7,837,200
Cincinnati	960,730	1,179,885
Cleveland	1,460,939	1,711,165
Dallas	1,158,220	401,565
Denver	602,225	1,184,500
Des Moines	77,930	151,050
Detroit	1,930,115	1,134,700
Grand Rapids	181,137	213,862
Hartford	825,835	572,945
Indianapolis	659,560	721,918
Kansas City	1,073,514	1,823,830
Knoxville	35,315	18,410
Little Rock	223,686	123,102
Los Angeles	1,613,485	3,360,577
Louisville	526,450	296,559
Manchester	339,645	160,005
Memphis	656,115	349,967
Milwaukee	1,301,967	920,464
Newark	768,575	1,828,419
New Haven	305,639	763,608
New Orleans	283,352	408,068
Manhattan	14,195,197	15,891,311
Brooklyn	3,379,155	4,300,100
Bronx	1,767,530	5,637,325
New York	19,341,882	25,828,736
Oakland	684,519	1,621,423
Oklahoma City	451,205	481,885
Omaha	685,203	583,005
Paterson	229,936	219,121
Philadelphia	3,640,820	4,589,300

Plumbing For Large Buildings

By R. E. HEINE

The demand for better sanitation in semi-public and office buildings, together with the more stringent rules and requirements on the part of municipal authorities, has urged manufacturers, architects and contractors to a more thorough study of the conditions and problems in order to conform to the highest standards in this particular branch of work.

Toilet rooms and toilet facilities in large buildings should be subject to considerable study, not only as to equipment, but also as to detailed arrangement.

The question of ventilation is one of prime importance, as it is likely to involve other portions of the building. Toilet rooms are located either on a court or light-well, or constitute interior rooms, in which latter case mechanical ventilation must be resorted to. Proper ventilation cannot be secured unless an inlet as well as an outlet for the air is provided, which fact should be borne in mind in such cases where toilet rooms open to a court or air shaft only. If, instead of windows, registers are used, louvres should be provided to permit of regulation of the draft. A small register placed in the lower panel of the door will be found of great assistance towards increasing the frequency of air changes.

Where mechanical ventilation has to be resorted to, the exhaust registers should be placed near or just above the floor line. If dividing partitions between the stalls are used, these registers can be placed underneath these partitions and, unless the room contains more than four fixtures, one register will provide sufficient exhaust. A transom or open grill above the door is necessary to insure perfect ventilation, the incoming air to be taken from or near the ceiling, which at the same time effects a removal of vitiated air from the corridors. From four to five changes per hour of the air in toilet rooms will be found sufficient to meet the average conditions, although in much frequented places six to ten changes may be necessary. Reducing the exhaust fan capacity below the sum total of all the toilet rooms is poor economy, but the fan should be provided with such controlling devices as will permit of operating at any point between one-half and full normal speed. The connection between the main exhaust duct and fan should be a flexible one (double canvas, painted), in order to eliminate the transmission of vibration and noise.

Sanitary features should govern the selection of the type of fixtures to be used. The one-piece porcelain urinal, with integral floor-trap, has superseded all other types, and eliminates the necessity of a separate floor drain for the toilet room. As the trap for this type should be set below the floor, raising of the latter may be necessitated, which is very undesirable. By careful planning, exposed piping at the ceiling may be avoided. Automatic flushing tanks should be used in preference to chain or hand pulls, as the latter offer no assurance of proper or regular flushing.

Wash-basins of the porcelain or enamel type are preferable to and more sanitary than those having marble slabs. In choosing the design, corrugations, recesses and ornamentations are to be avoided. Faucets of the self-closing type, preferably those closing with the pressure, are almost universally used in public and office buildings, and a type of handle which can not be kept open by the insertion of a block or rod of some sort will prove to be the least annoying. Some simple and reliable form of waste, which can not be pulled out or easily tampered with, is decidedly better than the plug and chain. The additional first cost of such a type will soon be offset by loss from theft and renewals of plugs and chains.

As the basin and the toilet supply of water is usually taken through house tanks from a well, a separate service for drinking water will often be found necessary and advantageous. This system should be arranged with a circulating riser so that a water cooling plant may be installed at a future time if not contemplated in the original installation. Tanks for the drinking water supply should be provided with tight-fitting covers.

In selecting the water closets, a syphon-jet type, with heavy bowl, free from ornamented surfaces, and the outlet of which will permit the passing of a ball two and one-half inches in diameter, will be found the most satisfactory and economical in the end.

The wall type, i. e. one supported entirely from the wall, while not as generally used as other types, possesses some meritorious features. The toilet room floors can be easily and thoroughly cleaned, there are no screws or bolt heads on the floor subject to corrosion and the floor slab can be built without the necessity of holes for piping. While perhaps a somewhat heavier wall is required to support the closet, this wall may be utilized in part for air ducts and pipes, and the length of the stall decreased from four to eight inches than where a floor type of closet is used.

Flushing tanks with chain or lever pulls have almost entirely been discarded in favor of the flushometer. The first cost of an installation of the latter is somewhat higher than that of tanks, owing to increase in size of supply pipes and the cost of the valves, but proves to be decidedly more economical in the consumption of water. Rubber diaphragms and delicate mechanisms are to be avoided in flushometers. The valves should be placed entirely outside of the bowl and in a manner permitting of repairs without entirely disconnecting the closet.

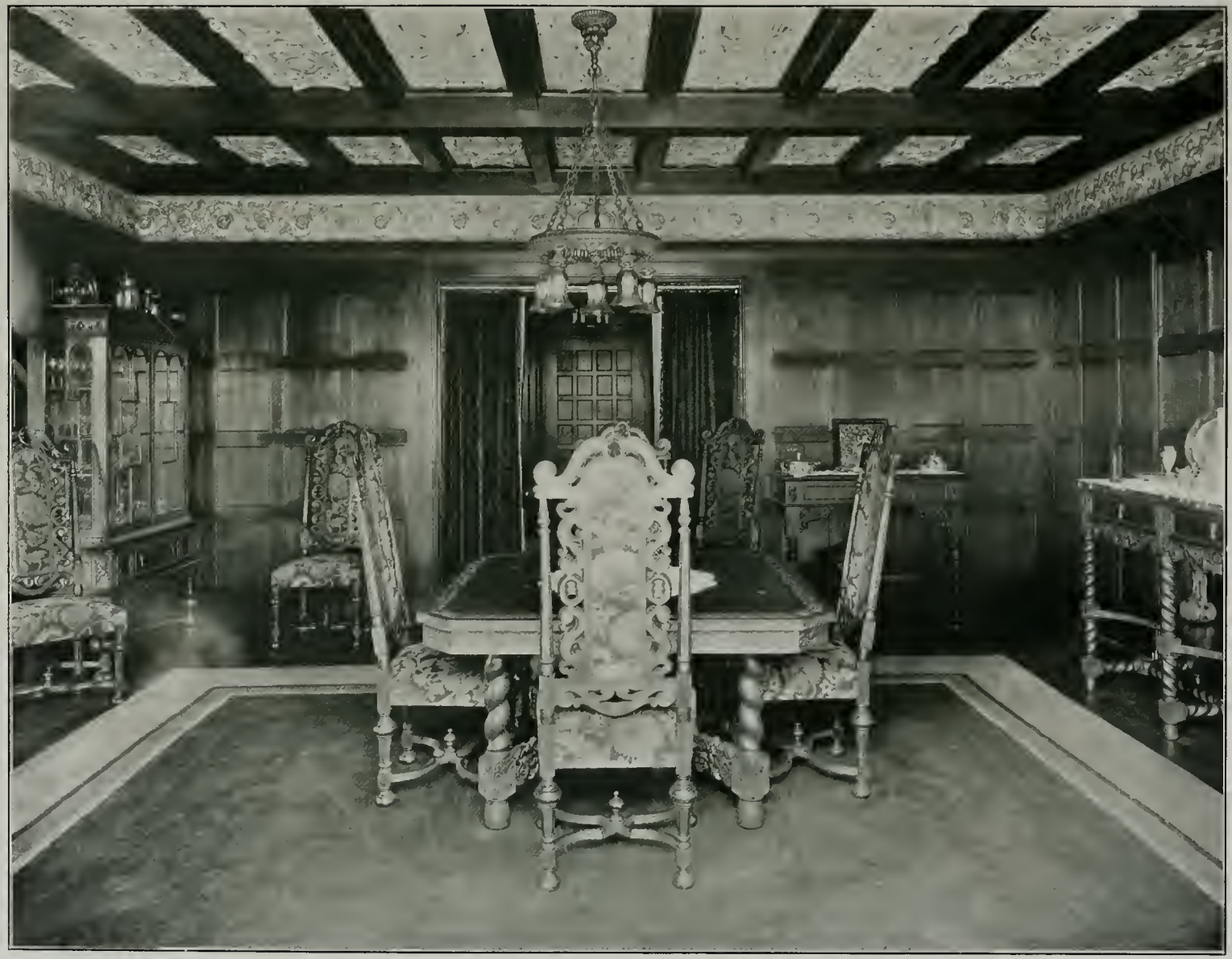
Minor accessories and equipment, as well as the general finish, are governed entirely by local conditions and ought never to interfere with the general arrangement or construction. Adherence to the old saying that the "best is none too good" will contribute largely to the ultimate success of this feature of the building.

Watertight Concrete Walls

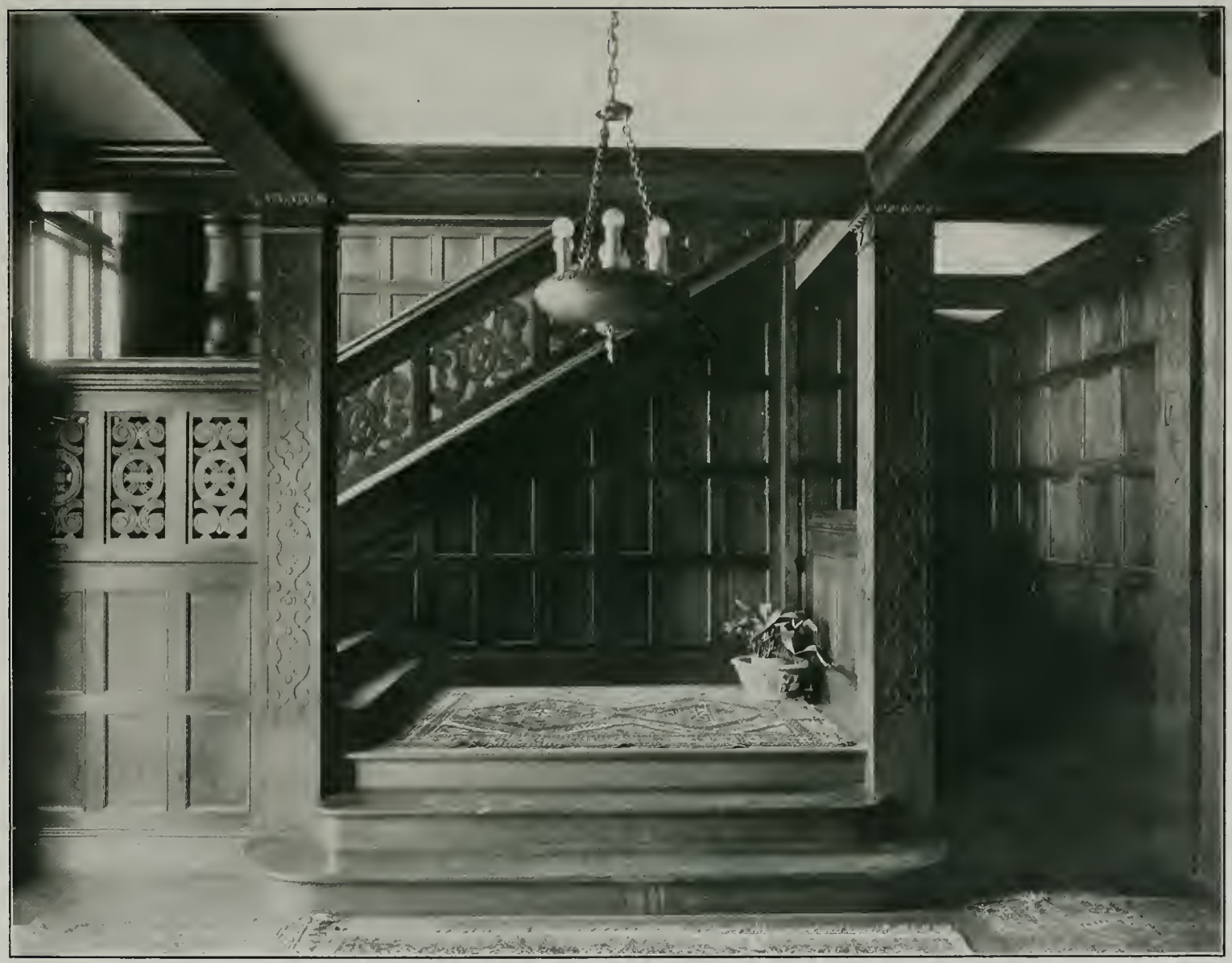
To render concrete walls constructed in wet grounds watertight has always been a perplexing problem and one that is solved, if solved at all, with considerable difficulty. The problem was recently raised in the construction of the sewage-pumping station at East St. Louis, Ill., and was solved by the use of steel plates. Great precautions were necessary to prevent an inflow of water to the pump floor, which is several feet below the normal ground saturation.

Asphaltum and waterproofing compounds mixed with cement was used for waterproofing the foundation slab, seven and one-half feet in thickness, near the middle. From a level below this waterproofing layer, steel plates were placed in the side walls at a distance of one foot from the back face. As they were placed they were riveted into a complete shell, the joints being pointed with asphaltum. The results were entirely satisfactory.

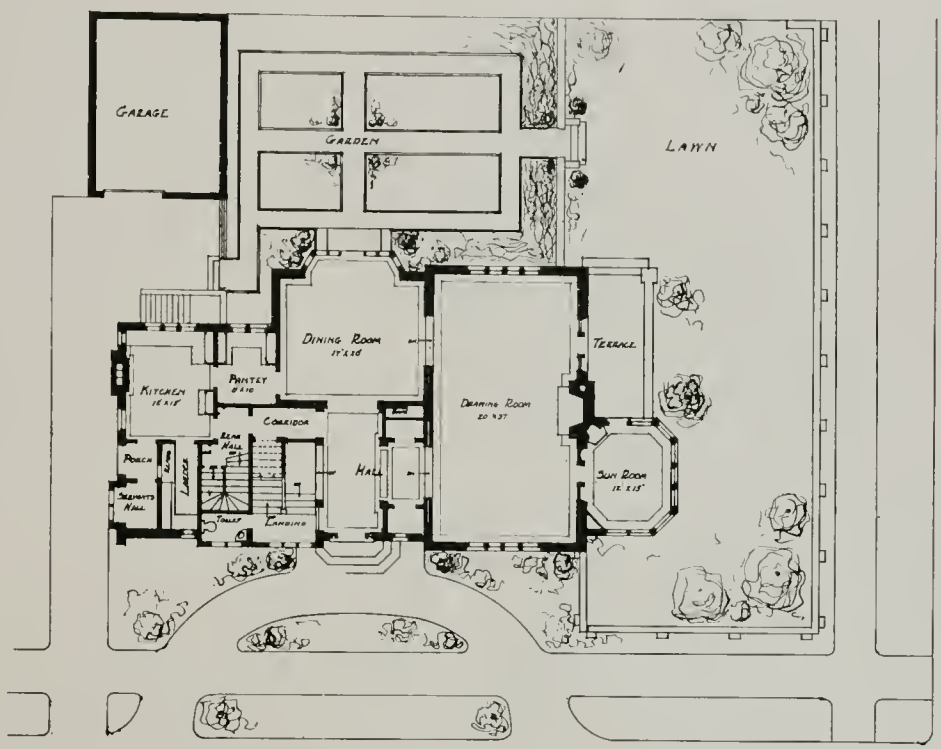
Residence for Mrs. Clare Farnsworth
Mr. W. Marbury Somervell, Architects, Seattle, Wash.



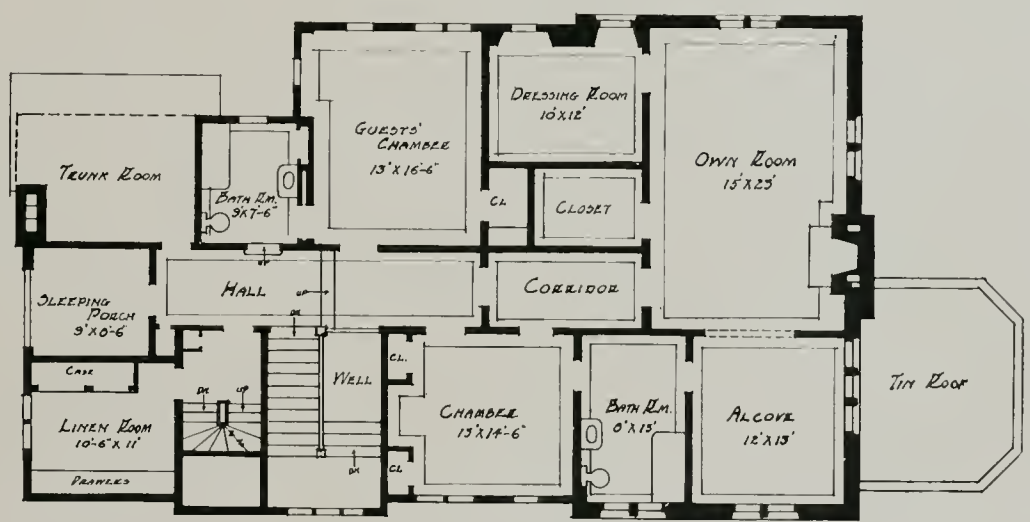
Dining Room, Residence for Mrs. Clare Farnsworth
Mr. W. Marbury Somervell, Architect, Seattle, Wash.



Stairway, Residence for Mrs. Clare Farnsworth
Mr. W. Marbury Somervell. Architect, Seattle, Wash.



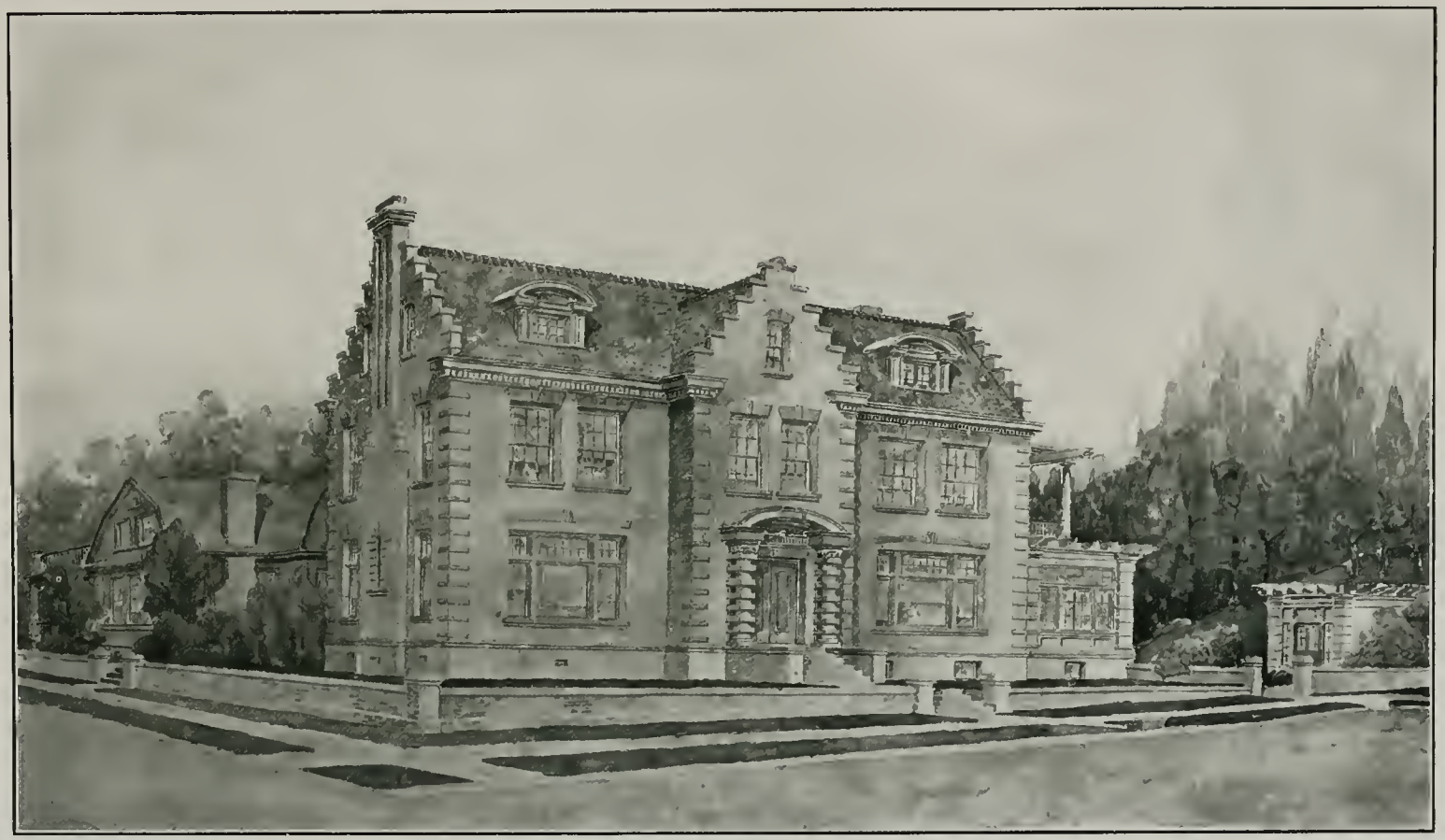
FIRST FLOOR PLAN



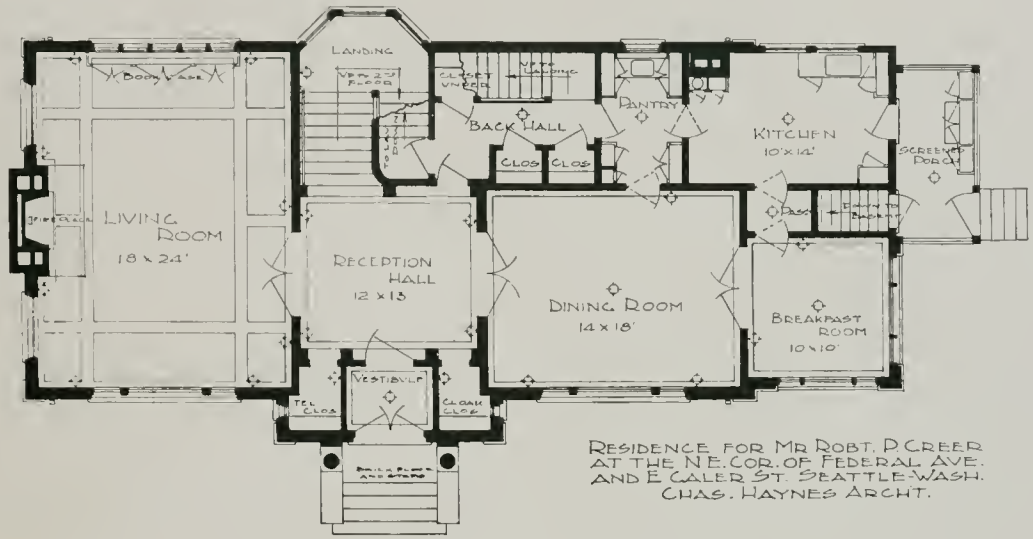
SECOND FLOOR PLAN

First and Second Floor Plans, Residence for Mrs. Clare Farnsworth
Mr. W. Marbury Somervell, Architect, Seattle, Wash.

PACIFIC COAST ARCHITECT
JUNE, 1911

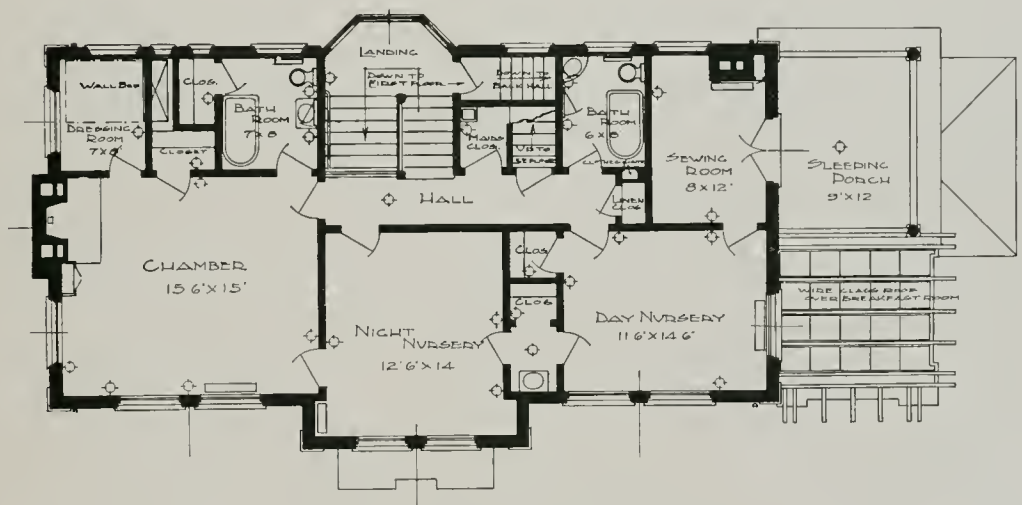


Residence for Mr. Robert P. Greer
Mr. Charles Haynes, Architect, Seattle, Wash.



RESIDENCE FOR MR ROBT. P. CREER
AT THE N.E. COR. OF FEDERAL AVE.
AND E. CALER ST. SEATTLE-WASH.
CHAS. HAYNES ARCHT.

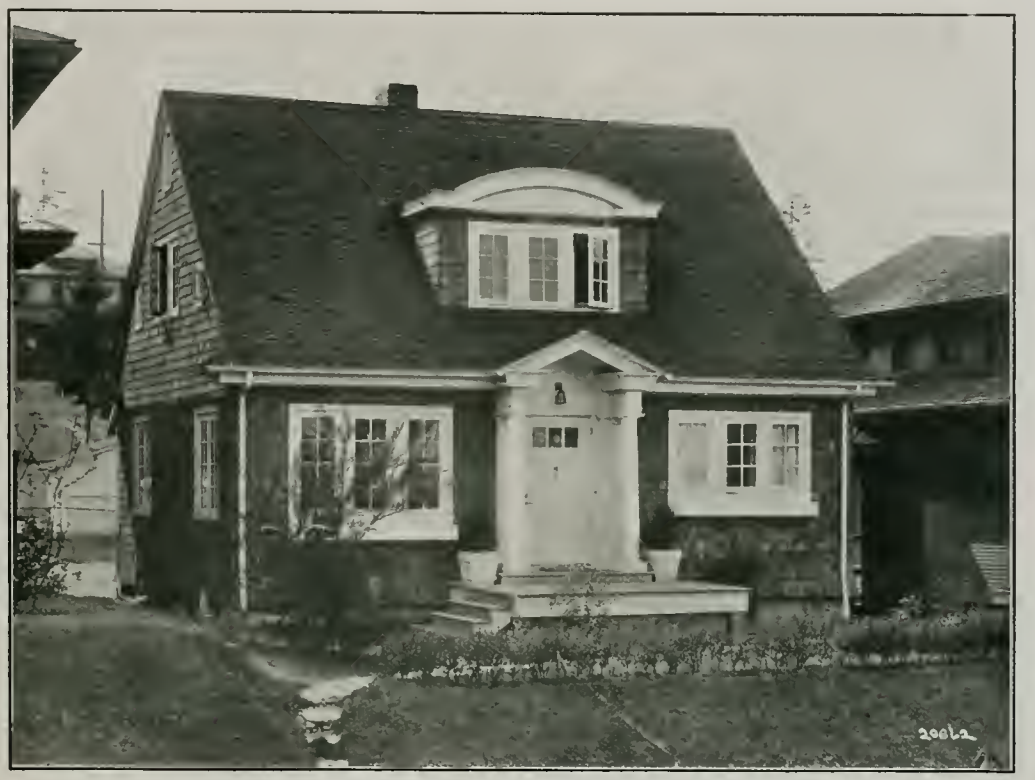
FIRST FLOOR PLAN



SECOND FLOOR PLAN

First and Second Floor Plans. Residence for Mr. Robert P. Greer
Mr Charles Haynes, Architect, Seattle, Wash.

PACIFIC COAST ARCHITECT
JUNE, 1911



Front Elevation, Residence for Mr. E. W. Allen
Wilcox & Sayward, Architects, Seattle, Wash

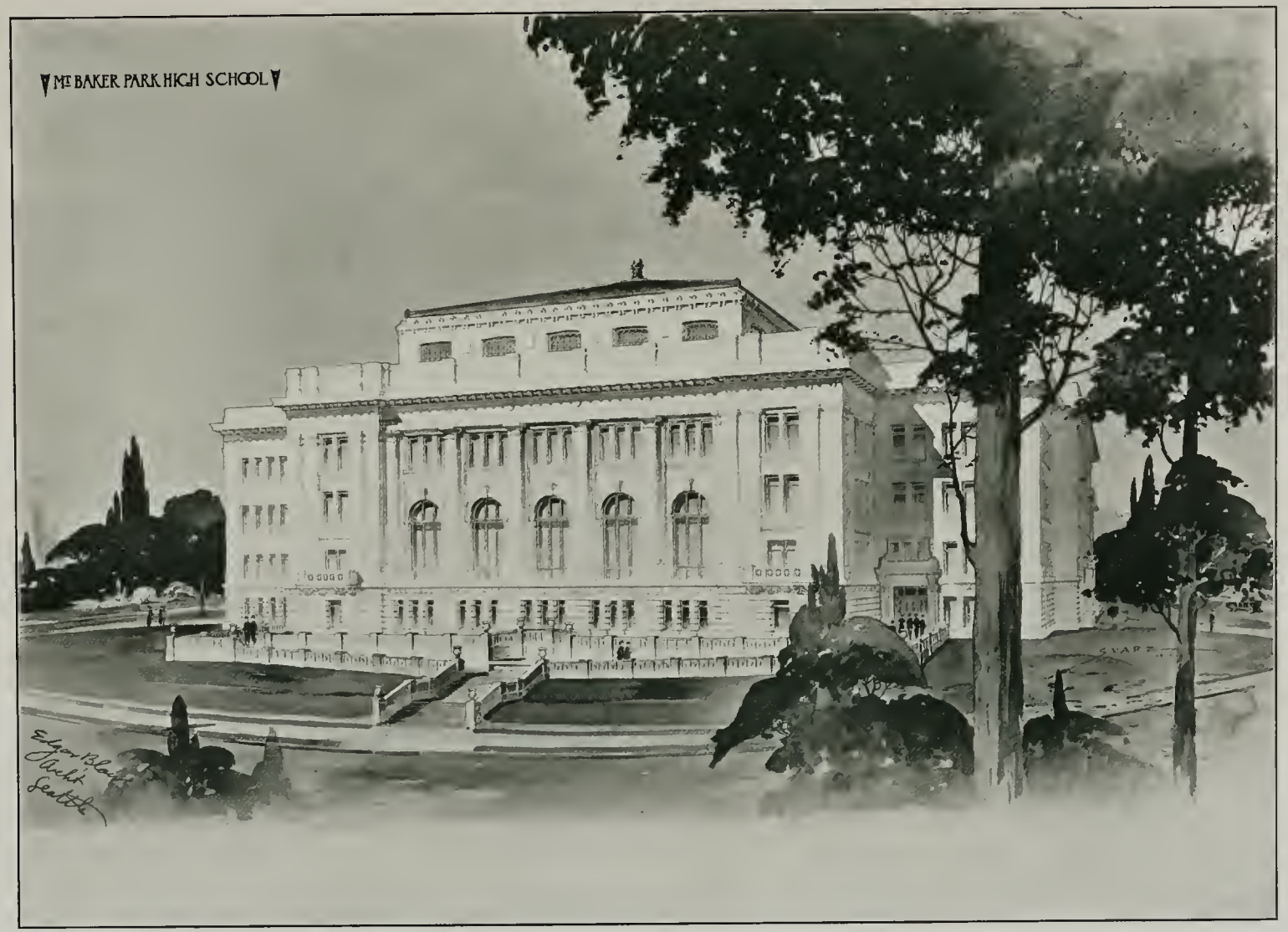
Living Room, Residence for Mr. E. W. Allen
Wilcox & Sayward, Architects, Seattle, Wash.

Rear Elevation, Residence for Mr. E. W. Allen
Wilcox & Sayward, Architects, Seattle, Wash.

Residence for Mr. John Campbell
Bebb & Mendell, Architects, Seattle, Wash

Bon Marche

Mr John Graham, Architect, Seattle. Wash



Mt. Baker Park High School
Mr. Edgar Blair, Architect, Seattle, Wash.

The Licensing of Architects

There would seem to be no good reason—logical, practical or ethical—to require from any man the payment of a yearly license fee (not a tax in the ordinary sense of the word) for the permission to practice any profession, writes an Oregon architect. None is imposed upon the lawyer, the doctor, dentist, nor is any such fee required in any of the trades. A mercantile tax, it is true, is exacted for the privilege of carrying on certain businesses, but the reason for such tax is obvious. It is only hucksters and the itinerant peddlers who come within the category of the annually licensed. Why architects should seek to get into this class can only be explained on the hypothesis given later.

Architectural license, with a vigilant building inspection department, is a negligible quantity. The number of plans coming to the office of the inspector that do not comply with the code, and are blue penciled for amendment, is surprisingly large, but the corrections are rigidly insisted upon before the permit issues and the possibility of a blunder is reduced to a minimum. Strict inspection of the building operation is enforced during the progress of a building, and any laches or neglect or failure to comply with the law is speedily checked, and the building can only be proceeded with when full compliance is made with the requirements of the building laws.

The incompetent man, whether architect or builder, is speedily discovered and forced out of business under such a system. He cannot go wrong, for he is not permitted to. If he does not know how to go right he is forced to quit. No license is given him.

Is not this better than exacting a paltry five or ten dollars from him, and then giving him a piece of paper, and dubbing the veriest dub a "certified architect"? In the proposed law provision is made to include every one now in the state who has the effrontery to call himself an architect, as an acceptable object upon whom to bestow the title if he has five dollars to pay for it. It is only the newcomer who is to be submitted to an examination to prove his efficiency or proficiency.

What is the object of the proposed law? Does it not seem to savor of fear of the newcomer, a hostility, prejudice or jealousy of him, that seeks to keep him out? It would not elevate the "tone" of the profession one whit, or at the most not more than five dollars' worth per man.

The Illinois or California laws have not been productive of any marked improvements in the profession. Under the latter law the use of the word "architect" is prohibited to any man not duly certified and who has not a seal of his office denoting his high calling. Nevertheless, parties calling themselves "designers" actually do design and build more houses than the duly legalized and licensed architects. It has been of no benefit pecuniarily and of no advantage professionally to the practicing architect. It may have deterred some timorous individuals from submitting to an examination and setting up as architects, but in all probability they must become "designers."

Off hand, how many of our own men could with any certainty give the strength of any described girder, or a graphic demonstration of the fitness of any truss to support a specified weight? What do they know about windstresses, moments or gyration or factors of safety? Yet a man might know all about these things and much more, and still be a poor architect. He might be a graduate of L'Ecole des Beaux Arts, or of Massachusetts Tech, or hold a diploma of architecture from Yale, Pennsylvania or Harvard, and be incompetent as a designer. The public soon picks the able from the inefficient, and no certificate from the state can be more effectual than public opinion. By a man's work shall ye know him. That comes near being Biblical, even if it is not an exact quotation.

It is to be hoped that the profession of architects is not to be narrowed, nor yet stilted. It should be free from prejudice.

Increased Brick Output

The enormous fire tax on the people of the United States imposed by flimsy and inflammable buildings, says Jefferson Middleton of the United States Geological Survey, in *Clay-Working Industries,* an advance chapter of *Mineral Resources* for 1909, has aroused public sentiment on the subject of fireproof construction, and as a result the demand for fireproof structures is increasing, and the growing use of brick and other products of burned clay has been the natural consequence. The use of hollow building tile or block for outer walls seems to be on the increase. Some very attractive architectural effects have been produced with this tile in combination with brick and with stuccoed outer surfaces. Improvements in front brick, both in texture and in color, have been attained during the last few years and have enhanced the value of this product as a building material.

Not only was 1909 a year of prosperity in the clay-working industries, but it was notable for the introduction of some important improvements. The most prominent of them is the brick-setting machine introduced in the West. The idea of handling brick by machinery originated in New England and a plant equipped several years ago with an elaborate system was the first to use the "unit stack." By this system the unit for handling was 1500 brick. The plant was destroyed by fire and was never rebuilt. In 1909 a system of handling from 600 to 1000 bricks on a somewhat different plan was put into successful operation in the West and is now being used in Chicago. By this system it is possible for the brick to be carried from the molding machine to the drier, from the drier to the kiln, and from the kiln to the stock yard or the delivery car or cart without being touched by hand. Each of these machines is said to do the work of 40 men.

More and more attention is being given to the preparation of clay by weathering, mixing, grinding, screening and tempering before it is passed through the molding machine. It has been found that the quality of the product is much improved by better preparation of the clay. The number of operating firms continues to decline. A few years ago there were scattered throughout the country many small plants, but the present tendency is to concentrate the industry and to build plants with high-grade equipment and large capacity. The average value of the output per firm reporting in 1900 was $14,859; in 1909 it was $32,818. The capacity of brick machinery has been greatly increased in recent years. A few years ago a machine that would make 5000 or 6000 brick an hour was considered a wonder. Today machines are in operation that will turn out three times as many brick. The great tendency in the clay-working industries is to reduce the cost of production by the use of more efficient machinery and by the elimination, as far as possible, of hand labor.

Architects Will Meet

South Bend, Ind., will entertain the annual convention of the Indiana chapter of the American Institute of Architects. One of the principal features of the meeting will be an address by Irving K. Pond of Chicago, president of the American Institute of Architects.

Shells Used For Paving

Experiments Conducted in Texas Prove Successful. Vast Deposits of Material Found Atong Shores of Gulf of Mexico. Pavement Is Cheap

Decomposed shells, of which vast deposits are found along the coast of the Gulf of Mexico, is being experimented with as a material for paving streets and roads. Experiments that have been conducted thus far indicate that the shell road is a success. Within 50 miles of Houston, Tex., according to the estimates of engineers, there is sufficient of this material to construct a pike 200,000 miles long, 35 feet wide and six inches thick after rolling. This is the deposit along the shores of Trinity and Galveston Bays. It is estimated that there is an area of 50 square miles of the material with an average depth of 15 feet.

When shell is placed eight inches thick on a street and rolled down to six inches, it is as compact almost as cement, and with the proper crown sheds water. The *Houston Post* says:

"There is no material, and this has been demonstrated, that is more desirable for residential streets where the traffic is light—buggies, delivery wagons and autos when not used in the nature of an auto course.

"The same can be said of neighborhood roads where the traffic is confined to farm wagons and the lighter vehicles of the farmers in the course of natural events.

"For a county's main thoroughfare leading into a city like Houston, where the traffic is about as heavy as could be imagined, with all character of vehicles heavily loaded, all character of tires, and most of the steel tires narrow, where the roadway is used as an auto race course in addition to all the other traffic, shell will not stand up year after year without maintenance. If there is any material that will stand up under such conditions road engineers would like to be made acquainted with it.

"Just as soon as a road is paved it draws all the traffic. Autoists will go long distances out of their way to get on it. Autoists just out for a spin will make a run over such a road before they end their trip. Wagons loaded with lumber will make a detour in order to get on such a road, for it is a matter of economy in that it is less costly to place a double load on a wagon and almost double the haul, on a good road, than to load two wagons light for a haul over a rough road.

"On such neighborhood or residential roads as described above, shell paving is pretty. It is clean and noiseless.

"It is proposed that in some places where the traffic is a little below the average, that shell and asphaltum be used. While it has been demonstrated that this character of paving will not stand the traffic of this particular thoroughfare, which, as stated above, is extraordinarily severe, the experiment has demonstrated that under ordinary conditions as to traffic and with care such a combination of road material will produce a noiseless, dustless, roadway with a surface as even as an asphalt street. The asphaltum, with proper drainage, makes the roadway waterproof and holds the surface smooth and tough. And it is an economical paving."

San Francisco Grows Ornate

Lamp Posts on Kearney Street to Be Decorated with Flower Boxes

A street decoration scheme that offers a suggestion for Portland is about to be tried on Kearney street, San Francisco. It is proposed to have boxes suspended from the lampposts, the boxes to be filled with flowering and ornamental plants that are to be kept growing and carefully tended. The plan has been adopted by the Downtown Association, and is calculated to give that portion of the city a distinctive appearance and lend a charm to the old thoroughfare that will be truly Californian.

It was on Kearney street that the center of gaiety existed in the old days, and there much of the oriental and cosmopolitan life still exists.

In old Portsmouth Square is the monument to Stevenson with its reminder of his land of Bohemia. At the northern end is the Latin Quarter, the North Beach, Fisherman's wharf, and the cosmopolitan life of all nations. At the junction with Market street are the flower venders, with their baskets of colored flowers upon the sidewalks. And this addition to the ornamentation of the street will add to its individuality and charm.

This mode of ornamentation is said to exist in the European cities, particularly in Vienna. There the streets are said to have a particularly pleasing and gay appearance because of these hanging flower boxes.

Notable Brick Fence

That concrete has no, yet succeeded in robbing brick of its birthright, preserved in all ages and most of the world's countries, is constantly being demonstrated. One of the latest and most marked instances of the employment of brick for combined utilitarian and ornamental purposes, is seen in a handsome fence, perhaps wall is the most correct word, that surrounds the great subsurface area to the west of the Pennsylvania Railroad's great granite passenger station in New York City.

The curbing of the broad sidewalk that surrounds this immense structure has excited the admiration of all beholders. It is composed of deep blocks of granite about ten feet long and eighteen inches wide. These curbstones are so cut as to interlock in a solid and most pleasing manner. One seldom sees a more solid piece of construction work.

The brick fence referred to is equally interesting and attractive. This fence, or wall, which is six and a half feet high, is built of light gray mottled brick set on a foot-high granite base and having a solid heavy granite coping. To break what would otherwise have been the monotony of such a fence extending continuously for hundreds of feet there are built in it at regular intervals of about thirty feet square posts of about a two-foot face projecting slightly beyond the face of the wall and carried up above the coping and crowned each with a granite cap; and further to relieve the wall's monotony certain courses in it have been laid with alternate bricks slightly projecting, to give in the face of the wall between the posts the effect of panelling.

Praise For Portland

"Architecturally, Portland is considered the most promising as well as most prosperous city on the Pacific Coast," said Edward T. Foulkes, a prominent San Francisco architect, who is visiting his parents. "Portland's growth in the four years since my last visit here has been astounding. Her buildings now being built would be a credit to any city.

"In Coast business realms Portland is most favorably spoken of; in fact, it is regarded as the busiest city on the Pacific Coast. Los Angeles and San Francisco are busy, but Portland's building and air of business is better."

Mr. Foulkes is a Portland boy, having been graduated from the Portland High School, completing his technical education at the Boston Technical School, where he won distinction by winning a two year's traveling scholarship, seeing Europe.

Among the Architects

Architect H. G. Ellis, of Spokane, was a visitor in Portland during the Rose Carnival.

Architect A. H. Faber has moved from 212 Commercial Block to 322 Mohawk Building.

George Mackie has been appointed Building Inspector of Spokane to succeed J. N. Goodwin.

J. W. Swope has retired from Whidden & Lewis, and is reported practicing at Vancouver, Wash.

Architect Lionel Deane, formerly practicing at San Francisco, has opened offices in the Fechheimer Building, Seventh and Washington streets.

Roland E. Borhek has opened offices for the practice of architecture in the Savage-Schofield Building, Tacoma.

Architect P. A. Fee, of the firm of Parr & Fee, Vancouver, B. C., has returned from an extended trip to San Francisco.

Architect A. H. Albertson, Seattle representative of Howells & Stokes, has returned from a short trip to San Francisco.

Architects Spalding & Umbrecht, located at 405 Globe Building, Seattle, have dissolved partnership. Mr. Spalding has opened a contracting office in the Globe Building.

City Engineer L. T. Doyle, of The Dalles, who was accused of working for private individuals at times when the city was paying for his services, was exonerated at a recent meeting of the council.

The bungalow shown on the front cover of this issue is that of Mr. C. E. Groesbeck, Twenty-third and Everett.

The Bell Decorating Company, 832 Central Building, Seeattle, are being highly complimented on the decorative work of the Orpheum Theatre, of Seattle, of which they were the contractors.

R. N. Hockenberry & Co., are the architects of the bungalow shown on the front cover of this issue.

Wood for Reinforcing Concrete

Engineering has an article describing a method by which concrete can be efficiently and economically reinforced simply by means of wood. As is well known, the principle of reinforced concrete rests on the fact that cement is strong in compression and weak in tension; consequently, if some material can be placed in a concrete beam, so arranged as to take the tensile forces, while the concrete takes the compressive forces, an extremely economical building material is obtained. At first sight, continues *Engineering*, it would appear that wood could not efficiently replace a metal like iron. It is true that, for many purposes, wood may be considered as extremely weak when compared with iron. Under certain conditions, however, wood has a very high tensile strength, so much so that, in ordinary circumstances, wood does not fail in tension, but generally by shear. Fortunately, the conditions for ensuring that the full tensile strength of wood shall be obtained are met with in reinforced concrete work. Providing proper adhesion takes place between the wood and the cement (and tests have shown this to be the case), the timber cannot fail by longitudinal shear, but can only break in pure tension. It is not suggested, however, that wood reinforcement should be compared with steel reinforcement for all purposes, but rather that it has a special sphere of its own, without entering into competition with ordinary ferro-concrete. Just as ferro-concrete is tending to replace steel construction for buildings, bridge construction, etc., so may we expect to see this ligno-concrete competing advantageously with ordinary bulk-wood construction, as used in piles, posts, beams, footbridges, fencing, etc.

Exhibition of Circle A Club

The Festival week at Circle A Club has been rather quiet, following as it did two weeks of extreme activity in an exhibition of commercial art. The exhibition was a departure from the regular line of exhibitions, giving to the patrons of "the beautiful" in Portland an insight into the newspaper and illustration field. It gave to the layman an idea of the manifold processes through which an illustration must go before it appears to the public in our books and magazines.

The engravers and illustrating bureaus of the West put forth their best efforts to supply the club with their better class of work. Several posters in the German impressionistic style by Mr. Travezio, of New York, and a score of cartoons from the *Denver Post* attracted wide attention.

Sketch, life and design classes will continue throughout the summer, as the influx of artists and designers from the East has greatly increased the active membership and gives the younger men of the club an excellent opportunity to become familiar with the popular styles and methods.

Circle A Club wishes to extend their thanks to the public who saw fit to attend this exhibition and to the men throughout the country who, through their co-operation and loans, helped to make it a success.

Cement Company Buys Land

Portland Concern Will Establish Plant in Jackson County

The Portland Cement Company of this city, of which Amon Moore is president, has bought a large tract of land in the Kane's Creek district, west of Gold Hill, in Jackson County. The consideration was not announced. The land contains valuable deposits of lime and cement rock, and the company has had experts at work testing the deposits during the last two months. An option on the property was obtained several months ago.

The tract embraces about 2500 acres, and includes a large amount of timber. There are also four miles of roadbed, one-third of which has been laid with ties and steel rails.

The cement company will proceed at once to develop the property, completing the railroad, building a factory with 400 barrels daily capacity, and establishing a group of eight lime kilns.

Prison Brick Will Save

State to Use Product at Different Institutions

Prison-made brick will be used in the construction of new buildings for the state institutions, announces Governor West. There will be approximately 3,000,000 brick made at the Penitentiary yard this year. Of these 1,000,000 will be used on buildings at the Oregon Agricultural College, 500,000 will be used on the new ward at the Asylum, 500,000 will be used by the National Guard for armory purposes, and 1,000,000 will be used on the additional Capitol building.

The brick will be paid for at the rate of $5 a thousand from the various appropriations for the institutions. As the market cost of brick is $9 a thousand, the Governor estimates a considerable saving will be made, to apply on the maintenance cost at the institutions.

Sublimated Thatched Cottage

While a vast deal of money is being expended on country houses, a marked tendency towards simplicity in appearance has developed within recent years. This is particularly true of the fine country homes of New Yorkers that practically cover the hilltops of Westchester County. Many of these are decidedly pretentious in appearance, but their owners no longer take pleasure in speaking of them as great estates, as many of them really are, but prefer to designate them as modest homes. This idea is being carried into practical effect in the construction of new and costly homes in that inviting section. This tendency towards simplicity is fast impressing itself upon the architecture of the entire section and sublimated, or refined, structures are fast being constructed.

The style that has been introduced and is fast becoming popular is that presented by a firm of New York architects, Albro & Lindeberg, which produces a thatched roof effect, thus returning to the English modes in vogue centuries ago. Of course no architect in these practical times would deliberately design a house, or rather, building with a roof of actual thatch, but these architects succeeded in designing a shingle roof that, to all practical appearances, was one of thatch.

This idea has, to an extent, been adopted in the rural palace of James Stillman, Jr., of New York, on top of one of the Pocono hills in Westchester. The immense thatched house at Pocantico, with its half timbered walls, its sloping roofs and other peculiarities, presents the "feeling" of an English cottage of the better class. The roof is composed of shingles, soaked until they can be made to assume any desired outline of graceful curve and develop the sense of depth, the lines and ridges that lend such a charm to wayside English cottages, rendering them a practical and pleasing part of the attractive landscape.

As designed by the architects this roof was made the striking feature of this country house. Following not only traditions but good taste, such a roof could not crown a building of pretentious height, hence this one was made low, seemingly hugging the ground which supports it as gracefully as any English home of lowly estate.

Low as the great house is, it is still further dwarfed in appearance by broad, low windows and other architectural devices which fearlessly violate the well established rules of the builder's art. As a matter of course such a subdued, sublimated cottage could not have a piazza attachment; this would violate all the consistencies, besides being too strongly suggestive of the fine country estate, to avoid which was one of the chief anxieties of the designers. On the garden side of the house one wing has a masked porch and a pergola so subdued as to be scarcely recognizable as such. These are the only outwardly visible deference to the uses of the house.

The garden entrance, in reality the chief approach to the house, which sits on the brow of the hill, leads along a brick wall through beds of flowers, thus adding to the rustic effect. The door is without the slightest ornamentation, a veritable hole in the wall. The building material employed is in keeping with the entire architectural scheme, the stone having been received from the neighboring fields. The other side of the house is supplied with a small and unpretentious porch, from which a splendid view of the fine scenery to the north can be secured. This facade conforms, as completely as the other, with the plan of the cottage.

The other houses on the extensive grounds conform in style with the cottage. There is the superintendent's house, with its thatched roof, showing the prettiness of this new device to probably greater advantage than even the principal building of Moudanne, as the house is called. Then there is the gardener's house, with the picturesque detail of the branches bursting through the so-called thatched roof, just as they might have done through the real roof after which this one is modeled.

These two smaller buildings cost vastly more than the cottages after which they are supposed to have been modeled. Simple as is the style of these structures and other attendant improvements, this country place is one of the most costly in Westchester. The estate is supplied with every modern improvement conducive to comfort, including a large power house to supply electricity. This dropping of ostentation, not to say vulgar, display of wealth in country residences is to be highly commended and ought to become the rule, since what is called fine and bold architecture does not harmonize well with rustic surroundings.

Preparations For Australian Federal Capital

The Minister for Home Affairs in the Federal Cabinet, writes Consul Bray from Sydney, announces the intention to establish a government brick-making works within the federal territory at Canberra to make bricks for the capital building operations. The discovery within the new capital area of promising deposits of raw material for this industry has led to experiments by the Home Affairs Department to test its suitability. Sample lots have been sent to both Melbourne and Sydney, and it is expected that results will be satisfactory. The supply of the clay is said to be practically unlimited.

The Home Affairs Department is, furthermore, making active preparations for road construction. Six heavy "trailer" wagons, each of six-ton capacity, are under construction locally. An order has been placed with a local firm for a stone crusher and elevator. A hauling engine will soon be required. American manufacturers who want to compete for business in this quarter should address the Department of Home Affairs, Melbourne, Victoria, Australia, marking their communications "Federal Capital Engineer."

Substantial Performance of Contract

Where defendant contracted to build a house for plaintiff according to a sample, plaintiff was not required to accept a house which was not like the sample, though equivalent in value or utility, but was entitled to refuse performance if the structure tendered was different from that required, allowing only for immaterial deviations involving neither change of plan, material, or general character of workmanship. Nance vs. Patterson Building Co. Court of Appeals of Kentucky. 131 Southwestern 484.

Clay Products

(Continued from Page 88)

and clay products used in buildings will give the highest return on the invested capital.

That clay products are not used is due to the fact that the clayworker has not been alive to the modern ways of advertising his goods. The clay journals, such as the *Clayworker*, *Brick Builder*, *Brick and Clay Record* and others, have done a great deal of this promotion work, but as their circulation is only limited, it has not reached the parties most vitally interested in the use of clay products. The Building Brick Association of America is now pursuing a course of education of the general public to the advantages of the use of clay products as a building material, and we sincerely hope that their efforts will be successful.

Trade Notes

The Portland Architectural Decorating Company has moved from 23 Grand avenue to 388 and 390 East Ash street, corner Grand avenue.

The F. T. Crowe Co. has sent out cards announcing the election of F. W. Farrington as vice-president and his appointment as manager of the local office. Mr. Farrington was formerly sales manager for the United States Gypsum Co. and succeeds J. H. Wood.

Rodgers & Kohler, Seattle, jobbers in tile, brick and fireplaces, have removed from the Globe building to 1101 Post street.

H. J. Cress, of Timms, Cress & Co., is absent on an eastern trip which will include New York City.

R. A. Eldridge, manager of the Western Refining Co., has returned from a trip to Seattle, where he has arranged with A. R. Gardner & Co., 103 Yesler Way, Seattle, to handle their Wear-Best Creosote Shingle Stain.

Oregon Brass Works, 73 Second street, report having installed the Hester system store fronts in the Ben Selling, Railway Exchange and new addition to Portland Hotel, and many of the most attractive fronts in Seattle and Vancouver, B. C.

The Lithic Manufacturing Co. has recently installed the Racolith floors in the new stores in the Portland Hotel.

S. B. Cooke, local manager of the Holmes Disappearing Bed Co., reports that he has sold over 400 beds during the past two months. Lawrence Holmes, president of the company, has been in the city helping Mr. Cooke during his rush.

The Lithic Manufacturing Co. has installed the "Higgins" all-metal screens in the Curt Dittmar residence and the "Higgins" metal screens and doors in the Peter Marsden residence.

The handsome appearance of the Cream Plastic face brick of the Washington Brick, Lime & Sewer Pipe Co., which is being laid on the new Multnomah Hotel, is causing considerable comment.

E. D. Timms, of Timms, Cress & Co., has returned from Collins Hot Springs, much improved in health.

Portland Sheet Metal Works has installed the labeled fireproof windows and doors in the Selling building; labeled windows in the Union Meat Co.'s plant at Kenton, and the roofing, skylights and fireproof doors in the Oregon-Washington Railroad & Navigation Co.'s freight sheds.

L. A. Spears, president of the Washington Brick, Lime & Sewer Pipe Co., of Spokane, was one of the visitors to the Rose Carnival.

The Lithic Manufacturing Co. received the contract to install the scagliola work in the Catholic Church at Coeur d'Alene, Idaho, the lobby and vestibule of the Fritz Apartments, Twelfth and Taylor streets, and the Racolith flooring in all bath and toilets.

The Washington Brick, Lime & Sewer Pipe Co. is furnishing 200 tons of light cream full glazed terra cotta for the Wilcox building, also 700 tons imitation light sandstone terra cotta for the Lincoln High School, shipments of which will begin July 1.

It is reported that the Acme Cement Co. of St. Louis is negotiating for the purchase of the We-tern Lime & Plaster Co. of Portland.

The Sullivan Tile Co. of Washington has closed its Seattle office.

C. T. W. Hollister, Pacific sales manager of the Washington Brick, Lime & Sewer Pipe Co., left recently for a short trip to Seattle, Tacoma and Vancouver, B. C.

W. M. Jacobs of Vale has been given a patent on a grade finder invented by him. The invention does away with the old-time spirit method and by the use of a scale and needle there can be no going astray from proper grades wanted. It is claimed that any person can, by the use of this grade finder, run perfect ditch grades, curves, roadbeds, etc.

The Columbia Elevator Co. has improved upon their individual electric elevator to such an extent that it has become universally adopted for use in the best hotels, department stores and apartment houses. It is mechanically operated and will stop at any floor to which it is sent. Among the new buildings in which it has been installed are the Warren Apartments, Wheeldon Annex, Cumberland Apartments and Lowengart Hotel on Washington street.

The Medford Brick Company will furnish approximately 1,000,000 of their sand mold brick for the new five-story hospital to be erected there.

Ralph R. Wheaton, a contractor at Prineville, Ore., has started a brickyard at that place.

Eugene, Ore., building permits amounting to $27,750 were issued during the month of May just passed, compared with $40,891 in May, 1910, but the first five months of this year show a greater total than the first five months of 1910. The total for January, February, March, April and May, 1911, is $156,425, compared with $154,016 for the corresponding period last year.

The Spokane building permits for May, 1911, were 182, permits with a value of $323,235 as against 235 permits for May, 1910, with a value of $824,425, showing a loss over last year of over half a million dollars.

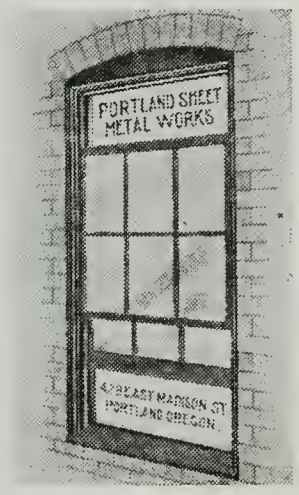
Among the recent buildings being constructed of Newberg Red Face Brick are 5-story apartments Eleventh and Clay streets, 4-story apartments Twelfth and Harrison streets, 3-story apartments East Thirteenth and Ankeny streets, residence Twenty-sixth and Marshall streets, Elks' Temple at Eugene, Oregon, and a store building at Lafayette, Oregon.

Reinforced Concrete Poles

An immense amount of pine lumber is being used in this country in the form of poles for electrical current, and this is constantly and rapidly increasing. Iron poles are employed, but their high cost restricts their use to very narrow limits. To some extent reinforced concrete poles are used, but thus far they have made but a small showing. In Germany, however, they are finding increasing favor and are coming to be quite generally employed.

Concrete poles, of great strength and long life, are being made in Germany in a very simple way and at a small cost. Large numbers of electric light posts are used in connection with the "Hohenzollern Sportpalast," the great skating rink of Berlin. As wooden poles are possessed of short life and those of iron are very expensive, those made of reinforced concrete were recently installed. These poles were all cast in wooden forms at the site of the work. They were fabricated and erected without the use of machinery and at a cost of not more than one-half that of iron poles. They were lightened by employing a tapering section. At regular distances holes were left in the poles, which not only reduced their weight and cost, but reduced the surface subject to wind pressure. The poles, curved over at the top, are 44.3 feet in height, of which 8.2 feet is in the ground. The poles, weighing more than nine thousand pounds each, were raised by wooden shear-legs without injury when only fourteen days old.

How is your Insurance Rate?



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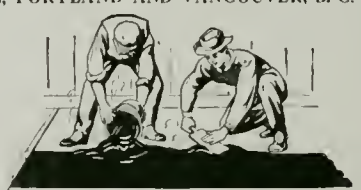

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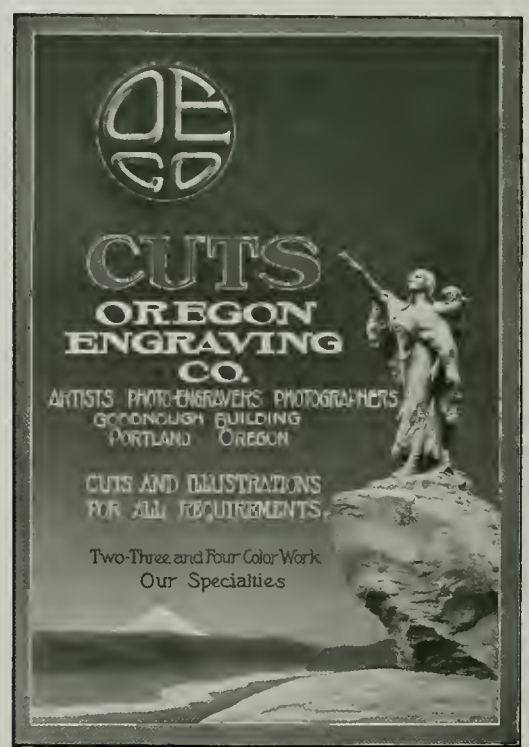

THE PACIFIC COAST ARCHITECT

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OFFICE OF PUBLICATION
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VOLUME 1 JULY, 1911 NUMBER 4

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The Editor will be pleased to consider contributions of interest to the readers of this publication. When payment for same is desired this fact should be stated. Self addressed envelopes must accompany all such contributions.

ADVERTISING RATES ON APPLICATION TELEPHONE MAIN 5121

The Architect Proposes, the Owner Disposes

On another page we note the dismissal of C. Grant La Farge as consulting architect of the cathedral of St. John the Divine. In commenting on the appointment of Ralph Adams Cram to succeed Mr. La Farge, the *American Architect* has the following to say:

It is probably superfluous to state that in the changing of consulting architects for the cathedral of St. John the Divine neither Mr. La Farge nor Mr. Cram have stooped to any act inconsistent with their high reputation in the profession. Undoubtedly, the condition as it stands today is the result of action on the part of the Committee of the Fabric of the cathedral entirely uncontrolled, either by Mr. Cram or Mr. La Farge. The situation is not precedent. Few truly great and monumental structures have ever been successfully carried forward based on one man's ideas. The work of the architects of the first instance will live and have its effect equally important with that of their successors, and, as it is impossible that this cathedral will attain completion during the lives of the present generation, we may expect to see the work of Mr. Cram supplemented by some man who is perhaps today toiling over his drafting board, a student in some atelier in this country.

From reports that reach us it appears that the real reason of the change is a disagreement between the committee in charge and Mr. La Farge. While the high standing of the architects concerned precludes any possibility of questionable practices, the lesson remains that (if we may be pardoned for paraphrasing a biblical quotation) "the architect proposes, the owner disposes."

It is no unusual experience for the architect of ideals to have his "creation of beauty" on paper become the "sore-eye of fact" when the building is finally completed. If the saying that "money talks" is true, is it not also true that in many cases, as exemplified in completed buildings, it fairly screams in the many abortions of architecture in both residence and other buildings?

Truly, "the architect proposes and the owner disposes."

The Use of Home Products

Senators Jones of Washington, and Bourne of Oregon, are finding busy days in an effort to convince the Supervising Architect at Washington that home products should be given an opportunity to at least enter the competition for material to be supplied by Government buildings erected in their respective states.

Time has created an unintentional trust in the office of the Supervising Architect in the materials to be used in the construction of Federal buildings. In Washington the people of that state contend that the Federal buildings should be constructed of local stone or at least the specifications for bids should be so worded so that they might, at least, have an opportunity to bid. The matter is now up with the Treasury Department and the Supervising Architect, and it is the belief that favorable action will be taken.

If the change is made, the policy of the latter department will undergo a change which will not only affect the construction of Oregon and Washington Federal buildings, but all the other states as well. The change will require that calls for bids shall include all kinds of stone, which seems to be the only material in question.

The Dishonest Contractor

With the "Wallingfords" of real estate who have infested the local field have also come the "Wallingfords" of construction. There are dishonest contractors in the local field as there are the dishonest real estate men. These men come from other fields with an idea of securing "easy money." When they accept a contract they have not the remotest idea of ever paying for the material used and do not pay more of the salaries than they have to. The consequence is that the innocent home builder is the one to These men come from other fields with an idea of securing "easy money." When they accept a contract they have not the remotest idea of ever paying for the material used and do not pay more of the salaries than they have to. The consequence is that the innocent home builder is the one to suffer through the operation of our inadequate lien law.

The recently organized builders' exchange will do much to do away with this class of "pest," providing they have the support of the legitimate building trades. Every honest contractor and supply man owes it to himself and his line to become a member. If you are not honest you cannot become a member, for the exchange vouches for its membership.

The American Style of Architecture

By ARCHIBALD G. RIGG

(Delivered June 5th before the Spokane Architectural Club)

The term American style is, in itself, a misnomer.

The word American as applied to a distinctive style of a distinctive people cannot be used because as yet the American nation as a composite and amalgamated whole is not a reality. It is true that we have developed some characteristics which might be termed National, but until there is a more complete fusion of the diverse traits of which we are composed, we cannot use the word American in an absolute sense. England has an architecture, the historical growth of an established nation; France, Italy and other countries the same; while America, infantile in history from point of time, has a little of everything architecturally, some good, some indifferent, most of it bad.

Among the first examples of architecture in America are those built by the early French in Louisiana, and the Spanish there and in Florida. But so characteristic were they of the people that built them, and so decidedly of an utilitarian purpose that they can hardly be defined as architecture, much less as American. Farther north—around New York, Maryland and the Carolinas—the Dutch and the Swedes were building replicas of their national architecture, modified somewhat more by the exigencies of climate and life so that they took on more the aspects of a new and separate country. But aside from these few examples of early times the main development of architecture was English up to the last quarter of the 19th century.

This English Georgian, which had its beginnings in the Renaissance, brought our architects in touch with the classical principles and style which they developed into the colonial or American Renaissance. The world at large was looking to America for an original and unique development in architecture, forgetting that the Americans were not a separate nation of distinct traits, but transplanted Europeans of old world traditions.

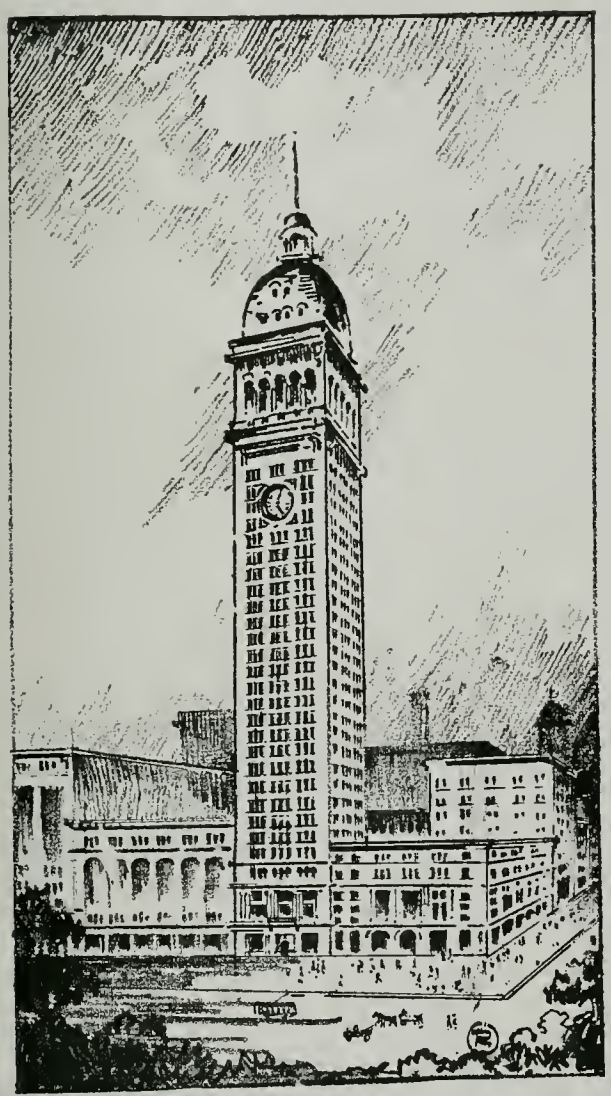
Taking the fundamental features of the Renaissance, coming to us through the clearing house of the English Georgian, we so invested them with local feeling through modifying them to the needs of time, place and materials, that they became essentially American and the probabilities are that if we had followed up this type instead of rambling into other architectural styles we would today have had a typical American style. In fact, our domestic colonial stands unique in its adaptation of Renaissance motives to the medium of wood which proved itself suitable to the development of the classical details and gained thereby an universal warmth and personality. The best examples of Colonial houses are found today in Annapolis, while the New York City Hall and Independence Hall of Philadelphia, in more durable material, remain to us as monuments of that period, while we were still working in Colonial, the

discoveries of Stuart and Rennet among the architectural remains of Athens had a very great influence in changing the types of building in this as well as in other countries from the Renaissance to its real prototype the Greek, so that toward the end of the eighteenth century the country became dotted with Greek adaptations which became the official style at least and remained so until about 1860, as the Treasury Department Patent Office and other public buildings were built in one or the other of its order. A notable example of this style is seen in the University of Virginia, and for that kind of building the Greek orders lent themselves admirably, but when our designers tried to apply these motives to domestic architecture they were found highly unsuitable, causing the style to die out slowly, except where used for public buildings, which helped familiarize the public with a harmonious assemblage of architectural forms. The latest and most impressive work of the Greek revival was the addition of the wings to the Capitol at Washington, without dispute the most impressive building in this country. In trying to imitate these monuments in the smaller towns with cheaper materials, all refinement and significance were lost. It was upon these conditions the Gothic revival depended.

It began very cleverly with the erection of Trinity Church in New York, completed in 1846.

This edifice was probably the first church of any size built in this country by a schooled architect, and its success created an immediate demand for this style of work for churches. At about this time Mr. Ruskin's interest for mediæval building of North Italy and his great enthusiasm soon had the younger architects of England studying the mediæval movements in other countries, and about 1860 the Victorian Gothic made its way over to this country, where everyone "got Gothic." When properly and conservatively handled by the studious men, the results were excellent, but to those who were prone to let their imagination run riot the almost inexhaustible supply of ornament in contrast to the limited details of classic, proved an Open Ses-

ame to architectural extravagance, so that the real architects became discouraged and began to revert to the dignity and simplicity of colonial building. The time was now ripe for the importation of the next British fashion, Queen Anne, which included the Jacobean and Georgian styles. In Queen Anne architecture, it was the suggestion of historic home atmosphere, though much disguised with American nonsense, that appealed to the better educated people without their knowing it; they thought Queen Architecture



merely another clever fashion. But, as practised now, this style is used by the speculative builder only, for the better classes know that the secret of successful architecture does not lie in odd conceits and inventions.

This bizarre jumble led to a reaction toward the colonial which, however, was interrupted by H. H. Richardson with his original adaptations of Romanesque. His first success was Trinity Church, Boston, completed 1877.

This style commended itself to the younger architects by the absence of the financial elaboration into which most of the Victorian Gothic had degenerated. On the other hand the drawback of the style for modern purposes was its inherent rudeness. Richardson, himself, not only made no effort to soften this, but delighted in it, and exaggerated it beyond reason. However, those who did not copy his extravagances but sought the sources of his designs, produced some very creditable work.

This style gave promise of becoming a real living architecture, but this promise was destined to be broken, for the Romanesque Revival did not long survive the Revivalist. From what we have noted of the different styles in America from the earliest times, it is plain to be seen that they have been adaptations of foreign styles. Great umbrage has been taken here and in other countries to the word adaptation, as, unfortunately, it has been used in the sense of cribbing and plagiarism instead of signifying a certain allegiance to original principles and designs. What is there to offer on the other hand—originality and invention? Into what chaos in America have they led us. The result of the best adaptation is the gradual formation of a National style of architecture. Style is never evolved by architectural invention, for invention belongs to science. Of the many things that have gone to make architectural style the influence of individuals has counted least. One generation of builders has taken up the work where its immediate predecessor stopped. The fashions of architecture perish, style endures. Of course, we have today one development in building absolutely peculiar to America, but whether it can be called real architecture, or whether we want it labeled "The American Style," is an open question. I refer to the commercial buildings best exemplified in the "skyscrapers"—are they a necessity? Can buildings of 25 or more stories be legitimately placed on a street laid out for three or four story blocks as in New York. Is there no limit but that of self interest to which we may look? To the European cities that years ago limited the height of secular structures, our skyscrapers are architectural monstrosities.

The Word "Bungalow"

The word bungalow is an Anglo-Indian version of the Hindi bangla, which primarily means Bengali, or of Bengal, and is also applied to a thatched hut, says *Country Life in America*. It may be worth while to explain how this trivial and merely local name came to be fixed on the Englishman's house in India.

Early residents there engaged in military, administrative or trading duties and lived a nomadic life for the greater part of the year in tents. And since there was nothing in the indigenous buildings of Bengal suited to their requirements, their first dwelling houses, designed by themselves and built of materials at site, were naturally planned on the model of the Indian service tents to which they were accustomed—that is, a large and lofty room surrounded by double walls of canvas inclosing space between them, with partitions at two or more corners for bath or store rooms.

It is probable, indeed, that in the beginning the tent, itself, was occasionally covered with the sun proof thatch or bangla. The name and the thatch were all that were taken, and now the origin of the name is forgotten even by the most Indians, who accept the resonant, trisyllabic bungalow as the Englishman's own name for his own peculiar house.

Local Chapter of the American Institute of Architects

For the purpose of forming a local chapter of the American Institute of Architects, the following met at the Imperial Hotel June 19, 1911: Edgar M. Lazarus, Fellow A. I. A., Morris Whitehouse, Ellis F. Lawrence, M. A. Whitney and Frank Logan, members of the A. I. A. Ellis F. Lawrence was made temporary President and Frank Logan was made temporary Secretary.

A tentative constitution for the chapter was accepted, and a meeting called for June 26th, for the purpose of effecting a permanent organization. At this meeting the constitution was adopted and signed by those present, and the Secretary was instructed to secure the signatures of other eligible architects.

At a meeting held July 20th, the following were elected permanent officers to serve until the annual meeting in October:

President—Ellis F. Lawrence.

Vice-President—Ion Lewis.

Secretary-Treasurer—Frank Logan.

Trustees—Edgar M. Lazarus and Morris Whitehouse.

Arrangements will be made with the Portland Architectural Club to hold the meeting in their club rooms. The following have signed the constitution: D. C. Lewis, D. L. Williams, W. F. Tobey, Joseph Jacobberger, Mac Donald Mayer, H. Goodwin Beckwith, Folger Johnson, Edward T. Root, Robert F. Tegen, Ellis F. Lawrence, Frank Logan, Morris Whitehouse, M. A. Whitney, Ion Lewis, A. E. Doyle, Edgar M. Lazarus, W. C. Knighton, Otto Kleeman, J. A. Fouilhoux, Martin Schacht, Emil Schacht, Richard Martin, Jr., John G. Wilson.

The American Institute of Architects already has thirty-one chapters in the principal cities in the country, and is analogous with the Royale Society of British Architects and the Societe Centrale Des Architects of France.

Record in Paving This Year Will Beat Last Year

Paving companies operating in Portland promise from the present outlook, to eclipse last year's big record in hard surfacing of streets. Up to July 1, contracts had been let for 66 miles of new paving. Last year there were laid in Portland a total of 63 miles. City Engineer Hurlburt says that with an ordinary season, from now until November 1, every mile of paving so far contracted for this year will be laid, but that it was doubtful if any additional contracts would be let until the executive board became convinced that the paving contractors could hard surface all the streets they now have under contract.

The paving under contract will cost to lay about $3,500,000 or a little more than $50,000 a mile. The cost of paving 63 miles last year was $3,250,000.

They Had To Do It

The Automatic Sprinkler Company, of New York, which recently entered into a $12,000 contract with the state, has paid no corporate fee, regardless of warnings from the office, and there is a possibility that the company will have difficulty in collecting money on its contracts unless the fee is forthcoming.

Later—They "came across" to the tune of $225.

In our humble opinion and where possible preference should at all times be given to concerns who fulfill their obligations without the use of a club.

"Certified" Check by Contractors Alleged Fraud

On the strength of a check purporting to be certified by the American Bank & Trust Company, the city water board, at its meeting June 29, awarded to the Newport Engineering Company a contract for the construction of the new Albina water office building. Investigation by Deputy City Auditor E. W. Jones has resulted in the discovery that the check was never certified by the bank and that the company has no funds on deposit with the institution, excepting a few dollars.

There were 16 bidders for the water office job and the Newport Engineering Company submitted the lowest bid. Other bidders were suspicious of the Newport Company's check and they imparted their suspicions to Deputy Jones.

This official took a long glance at the check and was unable to decipher the name, written in red ink across its face. All he could make out was the word "accepted," and some illegible writing underneath. He visited Cashier G. L. MacGibbon, of the American Bank, and obtained from the cashier the information that the bank had never made any certification for the bidder and that the Newport company has only two or three dollars on deposit with the bank.

The bid of the Newport Engineering Company was for approximately $24,000, and the worthless check accompanying the bid was made out for $2400, or 10 per cent of the bid.

The check was signed by Harry A. Young, who, with J. E. Bennett, constitutes the Newport company.

As soon as the Title Guarantee & Trust Company had learned that the Newport Engineering Company had submitted a certified check to the water board it immediately secured a writ of attachment and served this on the bank. The title company seeks to recover from the contracting firm the sum of $2000 with interest at 6 per cent from April 11, 1914, and $250 in attorneys' fees.

A Beautiful Curtain

The curtain for the new Blackstone Theatre in Chicago is also worthy of notice. This is a tapestry curtain specially woven at Aubisson, near Paris, and is the largest single piece of tapestry, according to *The Fine Arts Journal*, ever imported into this country.

No other theatre in this country has a drop curtain like it and there are only two or three in the world. A theatre at Milan, Italy, has one, and there is another at Moscow in Russia. No Paris playhouse has such a curtain, and there is none in England.

William J. Sinclair, director of the Hasselgren Studios, conceived the idea several years ago of having a theatre drop curtain of tapestry. When the Blackstone Theatre was first projected he decided that the time had come to put his scheme into execution, and he proposed it to the gentlemen interested.

It is the largest single piece of tapestry ever imported into this country, measuring 30½ by 42 feet. Mr. Sinclair placed the order nearly two years ago. The immense, full-sized cartoon had then first to be painted. This was done in the studio of M. Lamaille, in Montmartre, Paris. Then, a year ago last June, the actual work of weaving began at Aubisson and only a little more than a month ago the completed curtain arrived in Chicago. The duty on it was a small fortune.

The tapestry is in part a reproduction of one of the famous tapestries once owned by Napoleon I and now hanging in the Louvre. The scene depicted shows a party of young people dancing on the green in the time of Louis XIII. The colorings are exquisite.

Architectural Disappointments and Their Aggravating Attendants

The Architect Receives the Blame for Faults Not of His Commission

By A. H. FABER

Direction is given with elaborate instructions to prepare the plan of a house, and after the expenditure of no inconsiderable thought and much time upon the design, the architect turns out what he is convinced will result in an artistic and acceptable creation. He explains the various features to his client, and he believes his effort is appreciated and will be carried out. The work begins, and he finds that the contractor and owner have arrived at an understanding to omit some of his cherished features and substitute other work for some of his most artistic details, as a matter of economy and saving in price. As a matter of fact, the few dollars saved in construction has depreciated the value of the house many times the amount saved, and the result is an actual ultimate loss to the owner in the worth of his home, and a loss in reputation to the architect, as the finished product is attributed to him. The parsimony of the client is common, and the house that seems to be lacking is the result, and should be blamable upon the owner, but the designer is the man accused of perpetrating it.

It may not always be penuriousness, however, of the owner, but outright perversity. As an instance: A bungalow covering a ground space 44 by 68 feet was designed, with a four feet wide overhang to the eaves of gables and side walls, and a special 2 by 8 foot boxed show rafter attached to the soffit of the projection. The contractor suggested to the owner that three feet was ample extension, and that the show rafter would be more substantial and of greater permanence if out of solid timber 4 by 4 feet square. The owner measured the overhang of a number of much smaller houses, and, finding they were all within three feet, concluded notwithstanding the much larger size of his own house, that three feet woud do for it. As "solid" sounded more substantial than "built up" he took the smaller show rafter. The house, despite the architect's protests, was so built, throwing the entire roof out of proportion, and making it look like a number six hat on a number seven head. The owner sees his mistake now and, while too perverse to admit it, takes great care not to interfere with the details of the house in any other respect. The house, unfortunately, has lost a most distinctive feature and is rendered commonplace. It would have stood a chance of attracting favorable attention from the symmetry of its design if built in accordance with the plan. Now its lack of proportion places it in that most numerous class of domestic architecture—the home built without any regard to external appearance.

To endeavor to make an inadequate amount of money erect a building costing a greater sum, or an effort to save a few dollars on architectural superintendence, inevitably ends in disaster to architectural beauty. Again the architect is credited with the inartistic result. But few see his original plans; all they know is the finished, unfavorable, inharmonious product. Church building affords instances of this unfortunate spirit of false economy. Take a certain church in the Ladd Tract as an instance. The Building Committee paid the architect for his plan and asked to be released from the superintendence fee. They had a carpenter who would carry out the design and save them unnecessary expense. He carried the design so far out that he must have entirely mislaid it. The bowled floor and the hammer beam trusses of the roof and ceiling entirely disappeared. A barrelled arch ceiling took the place of the exposed beams and they have an acoustic wonder in the church well worth going to hear. The echo of an echo can be distinctly heard. It would be difficult to duplicate this curiosity if one were to try. The bowled floor became an ineffective slope, of doubtful utility as aiding a view of the pulpit platform or of the speaker occupying it. Did they save money? The carpenter work alone (by day's labor) cost more than the entire estimated cost of the building.

The experience of having to cut out expensive decorative effects, the use of cheap instead of costly materials, and the substitution of inexpensive construction in place of the best of workmanship is common in every locality in the erection of any class of buildings—churches particularly. To design a church of stone, and find it too costly, to make a try of it in brick and still find it impossible and finally to resort to wood and be accused of violating every known rule and regulation of the building ordinances respecting frame construction under a special dispensation granted by the Council, has been known to be done. Such a building, if found satisfactory to everybody, and least of all to the architect, himself, would indeed be a marvel of construction.

To be given instructions to design a church building to cost not exceeding $30,000, and after the plans are completed and the work begun, to find that the church has had an accretion of wealth, and have the limit raised to $50,000 is an unusual experience. It may however, be as disastrous to the result as the matter of running short of the wherewithal. The attempt to add features not contemplated in the original design may result in a lack of harmony in the whole. In one such church the organ alcove was designed to accommodate a modest pipe organ suitable for the church's supposed financial condition. An organ costing twice as much as the one contemplated was purchased, and the attempt made to enlarge the alcove to fit the new musical occupant. The result was not satisfactory to the designer, though the organ builder and the expert musician who wrote the organ specification stated it would be difficult to improve upon the dissemination of sound produced by the location of the instrument and its accommodation. It would have been unquestionably better, however, had the church originally been designed for the size of instrument finally installed.

Liege Metal

An article of considerable interest to the world of aerial navigation for "heavier than air" as well as "lighter than air" craft is the new metal known as Liege metal. It is said to be 40 per cent lighter than aluminum and has a density of 1.762. Its surface is grayish-white, reflecting rays analogous to those of poorly worked aluminum. The following is its composition: Aluminum, 0.04 per cent; iron, 0.01 per cent; zinc, 0.44 per cent; sodium, 0.21 per cent; magnesium, 99.3 per cent.

Personal Mention

R. H. Thompson, City Engineer of Seattle, has returned from Washington, where he attended the Lake Washington Canal hearing before Secretary of War Stinson. Mr. Thompson represented the City of Seattle.

Carl L. Linde, formerly with Doyle, Patterson & Beach, has opened an architectural office at 618 Oregonian Bldg.

W. E. Hacker, of Tacoma, Secretary of F. T. Crowe & Company, was a recent visitor in Portland.

R. H. Frank, of the Waterhouse Price Company, suffered a painful accident last month. In going through the building at First and Madison streets, Mr. Frank failed to notice a 12-inch drop in the floor and fell, breaking his arm.

The Empire Construction Company is a new electrical contracting and engineering firm, at 102 Exchange Building, Seattle. The firm is composed of V. S. McKenney and J. F. LePage, formerly with the Agutter Griswold Company.

Architect E. E. McClaran is making an extended Eastern trip, taking in the larger Eastern cities, and will be gone about five weeks.

Architects Clark & Bristow, Henry Building, have dissolved partnership. C. H. Bristow has opened an office at 501 Maegly-Tichner Building.

Walter B. Hinkle, of Hermiston, Oregon, will supervise the construction of the $20,000 water works system for that city.

L. G. Hicks and Ralph Worstell, formerly connected with the Sutherlin Land & Water Company, have opened an engineering office at Roseburg.

Martin Schacht, of Schacht & Son, recently spent two weeks in Frisco.

R. E. Heine, local representative of Reid Bros., San Francisco, was a recent visitor at the home office.

L. F. Danforth, Secretary of the Builders' Exchange, has just returned from a trip to San Francisco. Mr. Danforth spent considerable time looking into the methods of operating the two exchanges in that city, and will, from now on, devote all of his energies to building up the local exchange.

M. L. Kline and family have been spending their vacation touring the southern part of the state in their automobile.

George J. Osgood, of the Chehalis Fir Door Company, spent several days in Portland recently.

The contracting firm of Allen & McNuney, of Wenatchee, Wash., has dissolved partnership.

F. E. Fremont, a local architect and builder, is locating in Prineville, Oregon.

J. A. Drummond, traveling representative of N. & G. Taylor Co. of Philadelphia, was a recent visitor in the city. The firm has discontinued its agencies along the Coast and will conduct their business direct through the home office at Philadelphia.

Architects Siedebrand & Heide, located at 497 Arcade Annex, Seattle, will open an office in Vancouver, B. C.

B. Statter, Northwest representative of the Pacific Portland Cement Company, has returned from a trip to Tacoma.

The Portland Architectural Club has leased the upper floor of 214½ Stark street, which, following the adjournment for the summer months, will be fitted out in an attractive manner for club rooms.

Architect Samuel G. Ward, of Olympia, Wash., has become associated with Potter & Merrill, Tacoma.

Joseph H. Wohleb has opened an architectural office at Olympia, Wash.

Architect Emil Schacht is spending his vacation at Seaview, Wash.

George R. Giblett has succeeded George Trust as Building Inspector of Tacoma.

Trustees Change Church Plans

The dismissal of C. Grant La Farge, the architect of the Cathedral of St. John the Divine, now in course of construction, by the trustees of the church throws an interesting light upon the peculiar methods employed in the erection of the great church edifice which is to crown Morningside Heights. Mr. La Farge and his former partner, the late George L. Heins, were the architects who made the original plans for the church about twenty years ago. They were in charge of the work of construction ever since the work began, until Mr. Heins died. Then Mr. B. W. Morris joined Mr. La Farge in the task of superintending the construction of the church. It appears that the original plans, which had been accepted by the trustees of St. John, were never followed. Upon the request or demand of the trustees changes were made from time to time, which materially modified the original conception of the cathedral's architecture. The trustees, of course, are of the opinion that the changes suggested by them are great improvements, calculated greatly to enhance the beauty and grandeur of the structure. Whether Mr. La Farge, being a mere architect and not a trustee, disagreed with the trustees or whether he was considered too slow to act upon the valuable suggestions of the trustees, is not known, but the fact remains that the trustees dismissed Mr. La Farge and supplanted him by another architect. It seems to be their plan to pay no attention to the original plans, but to continue the work regardless of plans, making alterations as the work proceeds and as their fancy may dictate. Architects are beginning to wonder what the cathedral will look like when it is completed, but that will not be for more than fifty years.

Glass Theatre Curtain

Glass is the material of the great fireproof curtain for the stage of the National Theatre in the City of Mexico, which was constructed here. There is no other such curtain in the world, and both in design and construction it is unique.

The curtain consists of a great frame of bronze, in which are set 200 panels of mosaics in favrille glass of iridescent hues. It weighs 27 tons and is 50 feet square. The mosaic work is set in a concrete composition which is alike impervious to heat and moisture, and furnishes a firm resting place for the 1,000,000 pieces of glass composing the picture.

To insure safe transportation the curtain will be taken apart and shipped in small sections. It is to be raised with hydraulic machinery capable of lifting it entirely from the view of the spectators in seven seconds.

Remarkable as is the work from the mechanical point of view, it is even more so for its artistic qualities. The architect of the theatre, Adamo Boari, planned to place upon the curtain the representation of some distinctively Mexican scene. Various attempts were made to carry out the design to paint on asbestos, and finally the present medium was selected.

The design portrays a romantic Mexican legend of the Princess Ixtaccihuatl, who was loved by a youth, Popo. The king father frowned upon the match, and when his commands were disobeyed, converted them into the great peaks which bear their names. Ixtaccihuatl is in the form of a recumbent woman, white and cold, while the volcanic Popocatepetl is consumed by hidden fires.

Side Elevation, Residence of Mr. George Matzen
Willatzen & Byrne, Architects, Seattle, Wash.

Living Room, Residence of Mr. George Matzen
Willatzen & Byrne, Architects, Seattle, Wash

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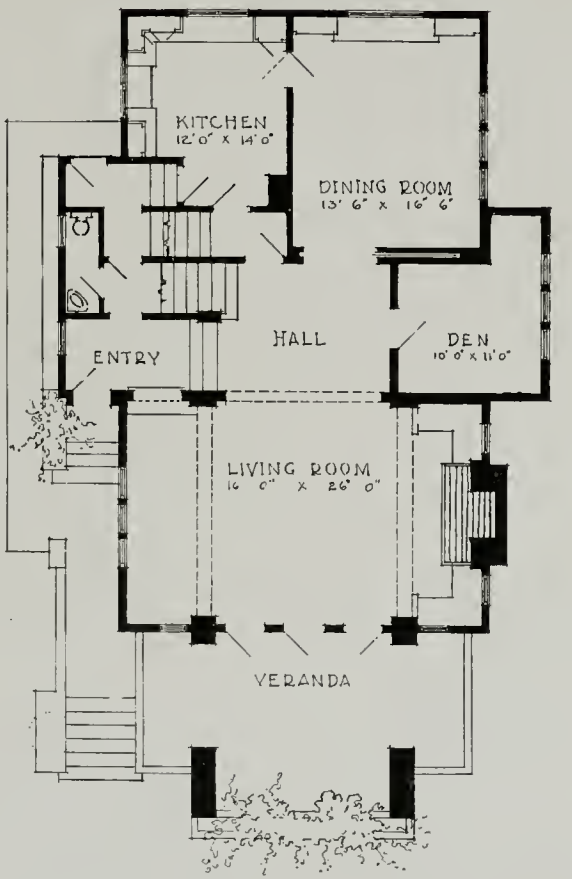

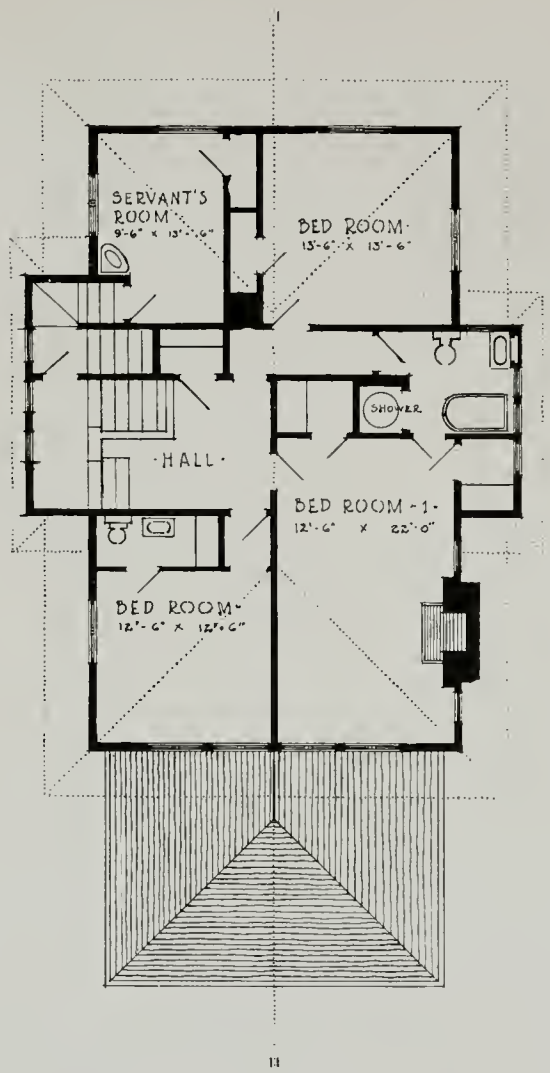

First and Second Floor Plans, Residence of Mr. George Matzen
Willatzen & Byrne, Architects, Seattle, Wash.

Sun Room, Residence of Mr. Langdon C. Henry
Willatzen & Byrne, Architects, Seattle, Wash.

Library, Residence of Mr. Langdon C. Henry
Willatzen & Byrne, Architects, Seattle, Wash.

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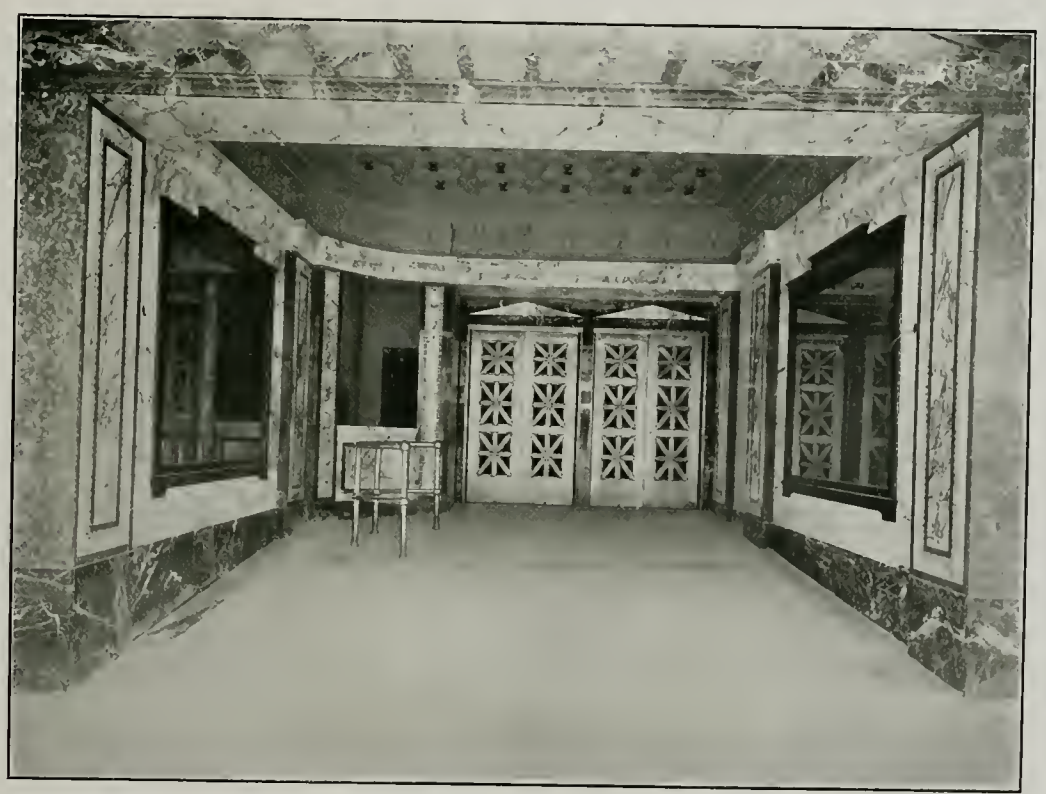
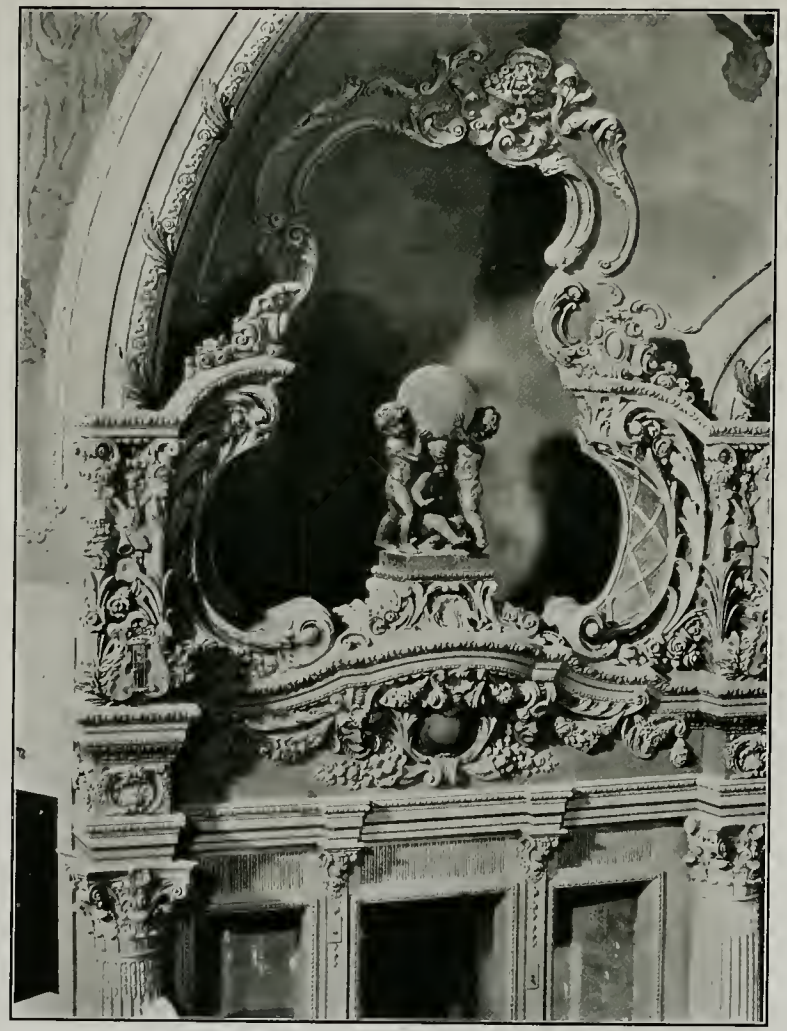
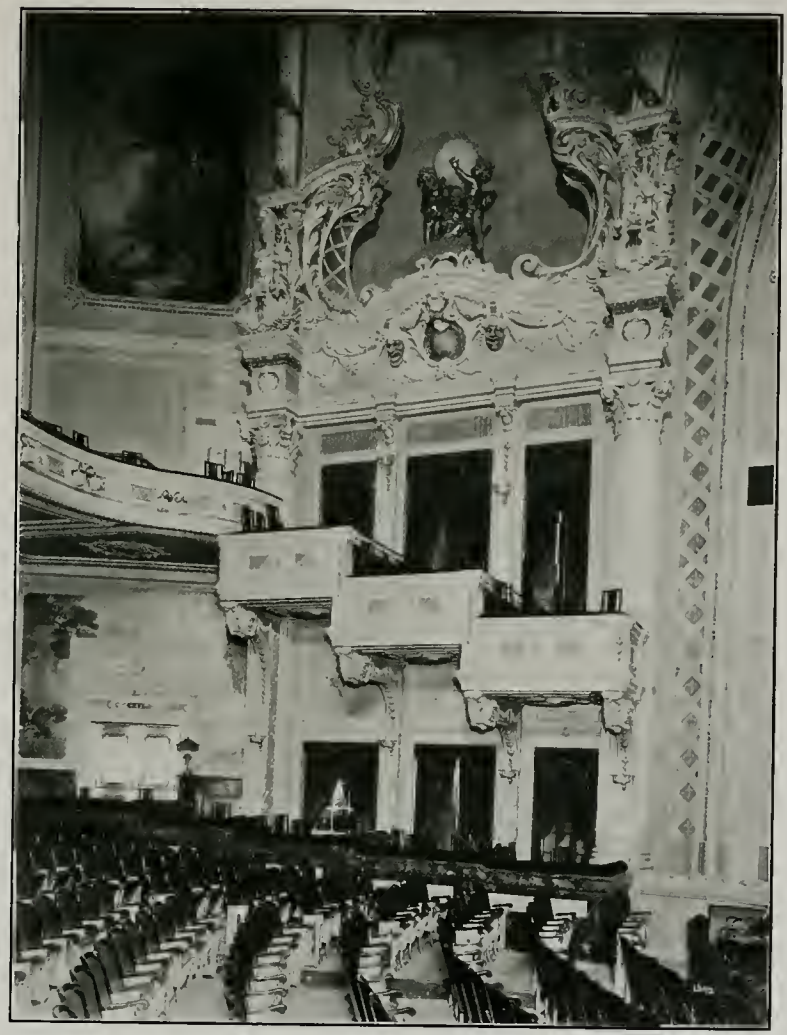
Main Entrance, Orpheum Theatre
Mr. William Kingsley, Architect, Seattle, Wash



Section of Grand Foyer, Orpheum Theatre
Mr. William Kingsley, Architect, Seattle, Wash.



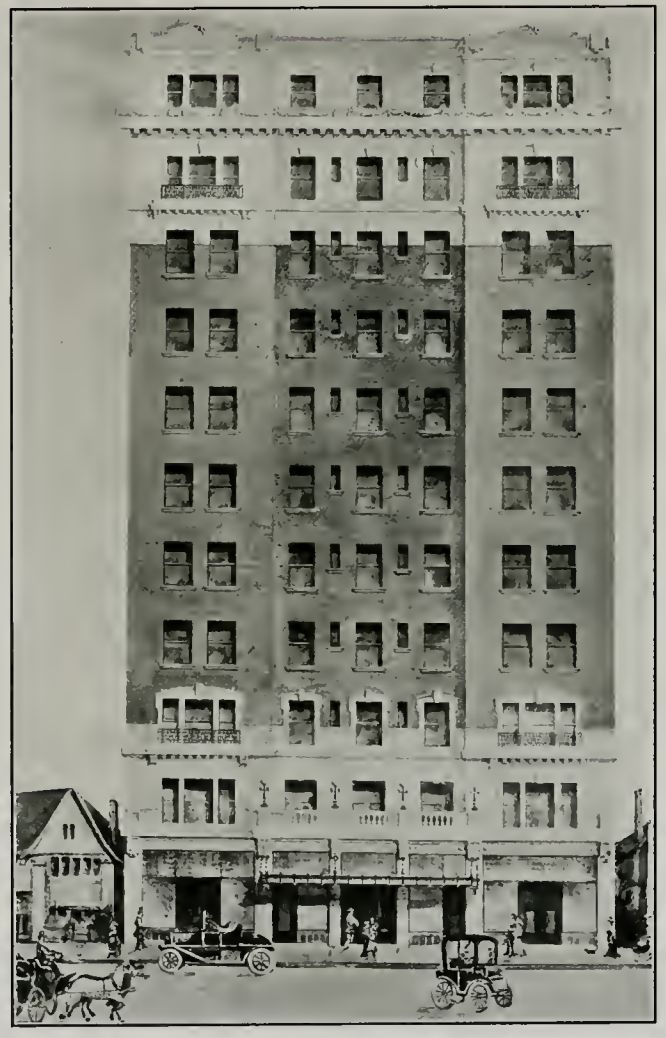
Niche in Proscenium Frame, Orpheum Theatre
Mr. William Kingsley, Architect, Seattle, Wash.



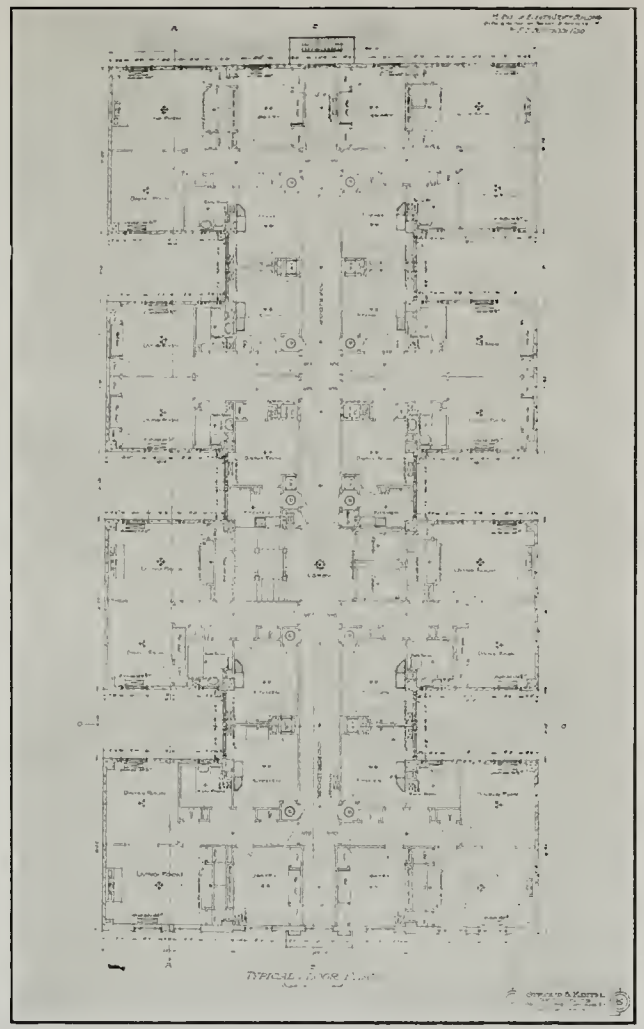
Crew of Boxes and Side View of House, Orpheum Theatre
Mr. William Kingsley, Architect, Seattle, Wash.

Curve over Proscenium Arch, Orpheum Theatre
Mr. William Kingsley, Architect, Seattle, Wash.

Side Panels of Balcony, Orpheum Theatre
Mr. William Kingsley, Architect, Seattle, Wash.



Apartment Building
Stroud & Keith, Architects. Vancouver, B. C.



Typical Floor Plan, Apartment Building
Stroud & Keith, Architects. Vancouver. Wash.

First National Bank Building, Cleveland, Ohio
Courtesy of Portland Architectural Decorating Co.

To Eliminate the Strike

At last the industrial world seems awakening to the idea and making up its mind to do something along the line of devising a sort of legal status to prevent strikes, to take care of labor disputes, and eliminate the strike. Moreover, the labor world itself should be to the point by this time where it can recognize that something of this kind may easily be to its advantage.

The strike as a means of settling disputes between capital and labor belongs to ancient history and has no place in this civilization of modern industrial workings. This is a view that might well be taken by labor and employer both, and not only taken as a view, but accepted as a doctrine, and then some steps taken to eliminate the strike.

There are multitudes of reasons why the strike is out of place in modern industry and in a civilized nation. And one of the important of these, one that brings it directly into line for some legal enactment, is the fact that no strike stops at involving the people in the dispute.

Take a strike in the building trades, for example, and it doesn't merely involve the employer and employes, but it involves the men having the building done, the men supplying material for the building, and often, to quite an extent, the general public.

It is the same way with variations wherever a strike occurs, and because of this fact, of the interdependence of one on another and one branch of people on another it all becomes what might be termed a sort of interstate matter and needs federal regulation. This should not be construed to mean that working men need coercing or an interference with their liberty, but it does mean that the general public and commercial world is entitled to fair consideration, and when people get into an entanglement that involves hardship and embarrassment to others, it is time for the state or federal authorities to take a hand.

In other words, to sum the matter up briefly, what we need is some court of resort for the settlement of differences between capital and labor. If we cannot get it with our present legal machinery then let us create something special for this purpose that will insure reasonable fairness to both capital and labor, and then make the strike and the boycott illegal implements. They are in a way related to the mob rule and the lynch law and constitute in principle, if not legal effect, the taking of the law into their own hands by the people who perform these things. The surprising thing about it is that we have gone along and tolerated such things interfering with industry and commerce for generation after generation without striking some specific means to not only end, but in the future to prevent them.—*Clay Worker.*

A court decision in St. Paul, if sustained, will place a club in the hands of tenants everywhere which can be utilized to secure the enforcement of the laws for fire protection. A tenant on a lease there, moved at the end of six months, and was sued for the rent for the remaining six months. His defense was that the building—an apartment structure—did not comply with the ordinance as to fire escapes and other matters. The court held this sufficient reason for breaking the lease. Building Inspector J. G. Houghton, of Minneapolis, favors a plan whereby the ordinance will nullify fire insurance on structures which do not comply with the requirements of the ordinances as to fire protection and prevention.

Building Records Broken by June

A new mark was made in Portland by the Building Inspector's office both in number of permits issued and the valuation of same. The totals for June, 1910, amounted to $1,587,725. For June, this year, $1,832,805, a gain of approximately a quarter of a million. These figures break all previous records.

Portland occupied sixth place among the leading cities in the country in the volume of new construction authorized during June. Five cities as follows, exceeded this: New York, Chicago, Philadelphia, Los Angeles and Minneapolis.

According to figures compiled for 55 of the largest cities representing all parts of the country, permits were taken out for 17,419 buildings, involving total cost of construction approximating $61,000,000. This is an increase of just 10.5 per cent over the aggregate of June, 1910. Los Angeles, San Diego, Oakland and Portland show gains over the same month one year ago, while Seattle, Tacoma and Spokane show small losses.

Join the Builders' Exchange

Every contractor in the City of Portland owes it to himself and to his trade to join the builders' exchange. The purpose of the organization is to cement into closer business relationship the building trades of the city and state.

Secretary Danforth is devoting all his time to the interests of the exchange and we predict that the time is not far distant that lack of membership in the exchange will mean that the contractor is a good man to steer clear of.

Big Concrete Span Nears Completion

When the Monroe street bridge, of Spokane, is completed it is claimed that it will contain the largest single span of reinforced concrete in the world. The central span is 281 feet, or 12 inches longer than the bridge over the Rocky River, under construction at Cleveland, Ohio, and 58 feet longer than the Wissahickon River structure at Philadelphia, which held the distinction of the longest span of its kind. The cost of the Spokane bridge will be about $550,000. In addition to the car tracks there is a team roadway and walks for pedestrians. A span of 285 feet has been adopted to carry the New York barge canal over the gorge near Medina, N. Y., and the span of the proposed Hudson memorial bridge is to be 710 feet. With the exception of the Hudson bridge the other largest single span yet proposed is one of 328 feet to be built by the municipality of Rome. A bridge under construction in New Zealand will have a 329-foot span.

Building Owners are in Convention

Cleveland, O., July 10.—The fourth annual convention of the National Association of Building Owners and Managers opened for a three days' session in Cleveland today with an attendance representing many of the chief cities of the United States and Canada. The convention will discuss a wide variety of subjects relating to the renting and upkeep of buildings and the most improved methods of construction in relation to the revenue. The compensation of superintendents, managers, engineers and janitors will also be discussed. Among those here to address the gathering are George T. Mortimer of the United States Realty Company of New York, Edward J. Murphy of Springfield, Mass., Henry C. Tulley of St. Louis, Charles J. Fuess of Utica, George Oppenlander of Denver, E. M. Hill of Buffalo and Charles F. McBride of Pittsburg.

Formal Opening of the Builders' Exchange

The formal opening and reception of the Builders' Exchange, held at the club rooms, corner Second and Alder streets, June 23d, was a successful as well as important event for the building trades of Portland. There were present over 300 persons, representing all branches of building construction.

The exchange has commodious quarters on the second floor of the new concrete building on Second street, between Washington and Alder streets. One of the main purposes of the organization is to raise the standard of building operations. A requirement for membership is that a contractor must not only be competent, but he must be honest and responsible. It is believed that the association will bring about a strong working force for the mutual protection of the allied trades as well as to property owners.

The exchange will be a clearing house for its members. Bulletin boards are provided on which all calls and bids will be posted. The architects will submit plans for buildings to the secretary, who will have them at hand when contractors are awarded contracts. One of the results of bringing the different interests together will be the saving of time and more contractors will be given an opportunity to submit bids.

The speakers at the meeting referred to the importance of the association to the city. Secretary Danforth, as chairman of the meeting, explained the purposes of the exchange. David Williams, one of the city's pioneer architects, reviewed the history of architectural work in Portland. He believed that the exchange should devote efforts to bringing about amendments of the present lien law, the employers' liability act and the city building code. He pointed out the undesirable features in each of these laws.

C. L. Linde, architect, complimented the organizers of the exchange, believing that organization would do much for the upbuilding of the city. He said that the exchange would prove to be one of the important associations in the city.

Building Inspector Plummer assured the members that he would co-operate with them in their work. He referred to the new building code. He said that while it provided for drastic changes over the old ordinance, he believed it would prove satisfactory in most respects.

One of the rousing speeches of the evening was made by E. D. Timms. He urged the members to work earnestly for the success of the organization.

"The exchange will become an important factor in the progress of Portland," said Mr. Timms. "Its members represent the big interests and active branches of the city. We want to enter into this work with enthusiasm and get results. Each member has an important duty to perform to make Portland the peer of all Pacific Coast cities."

H. M. Haller, president of the Portland Chamber of Commerce, said that the city was growing rapidly, and that it would make greater progress in the next few years than it ever had. He said that the organization he represented would aid the exchange in every way possible.

Other speakers were D. W. Wood, H. S. Hastings and Secretary Danforth.

Trade Notes

The Peerless Pacific Co. has opened a store at 6 and 8 North Front street, and will handle a full line of plumbers' supplies. H. T. McQuade is acting manager.

The Gunther-King Company has established a down town office at 66 Fourth street and has placed on exhibition one of their portable garages. T. G. Arrowsmith is in charge.

The Spady Manufacturing Co. has just completed installing the fixtures in the Spring Valley Wine Company's new home, also the Walk-Over Boot Store and the Forbes Jewelery Store.

W. P. Fuller & Company are placing the plate glass windows in the new County Court House.

The Portland Sheet Metal Works will do the water proofing, sheet metal work and install the metal windows in the new Lipman Wolfe Building.

Kelley Bros., Inc., have completed installing the heating system in the Congregational Church, East 32d and Taylor streets, and have the contract for the sheet metal work on six O.-W. R. & N. depots.

Apfel & LeClercq, 301 Maratime building, Seattle, have installed the Kinnear pressed radiators in the Commercial Club Building, Weyerhauser Building and Realty Building, Tacoma. The heating system of the Realty Building was installed by the Ben Olsen Company, of Tacoma.

G. W. Coover, manager of the Portland Concealed Bed Company, reports excellent business during the past month, having closed contracts for the installation of nearly 400 beds. Among the recent work completed is the American Realty Company's Apartments, 48 beds; Kingsbury Apartments, 29 beds; Apartment House, Eleventh and Clay, 74 beds; Trowbridge & Stevens Apartments, 25 beds. They are also manufacturing a new pivot bed, which is attracting considerable attention.

The Gunther-King Company has put in place garages for the following: J. L. White, 895 Lovejoy, Dr. F. M. Brooks, 755 Johnson, Capt. Grooves, 429 East 14th North. Also one for Charles K. Henry at the corner of 6th and Johnson streets.

Fred P. Smith, of the Public Works Engineering Company, has returned from Vancouver, B. C., where he turned over to the city the recently completed garbage incinerator.

The Western Sales Company was the successful bidder on the major portion of the supplies for the local post-office.

Olson & Company, manufacturers of Combination Insulator Fireless Cookers, have made marked improvements in their Cookers, and in the future the outside will be all steel and the inside aluminum. The Olson Cookers have been recently installed in the Housman and Lawrette Apartments and many private residences in the city.

Among the recent contracts closed by the Warren Construction Company for Bitulithic pavement are the cities of McMinnville, Forest Grove and Hillsboro in Oregon, and Centralia and Colfax in Washington.

The Empire Concrete Company, of Paseo, Wash., is the name of a new concern making various kinds of concrete work. The Company consists of Wm. L. Archer and R. L. Battan.

H. H. Carter & Son, of Aberdeen, Wash., is a new firm of contractors making a specialty of street work.

Building Inspector Bruce Garrison reports permits to the amount of $60,000 for Eugene, Oregon.

City Clerk W. H. Hodge, of Centralia, Wash., reports

the issuing of 34 permits for the month of June. The value of the improvements and new buildings total over $20,000.

Building Inspector C. W. Ewart, of Hoquiam, Wash., reports the issuing of 52 permits for the month of June, representing improvements to the amount of $77,410.

The Brick & Tile Company, of Gooding, Idaho, has been incorporated with F. O. McGill as manager.

John Wilson has taken over the brick yard at La Grande, Oregon, and will erect a new building this fall.

The Baker Fire Brick Company, of Baker, Oregon, is a new corporation. They will make a specialty of paving brick. M. F. Bennett is the President.

The Pacific Brick & Marble Company, of Portland, notified the trade last month that they had disposed of their interests to a Seattle manufacturing concern.

The Cement Workers' Union, of Medford, is publishing a notice of increase of the scale of wages as follows: Finisher, 62½c per hour; Helper, $3.50 per day; Laborers, $3.00 per day, and Boxmixers, $3.50 per day. Eight hours to constitute a day's work.

Willis R. Lebo Company of Aberdeen, Wash., are distributors for the Washington Cement for southwest Washington. They report considerable activity in that territory and have leased a dock to take care of their asphaltum shipments.

Medford, Oregon, reports new buildings and improvements to the amount of $1,000,000 for the present season.

Following the policy pursued by large manufacturers of adopting a distinctive name by which their product may be known, the Russell & Erwin Mfg. Co., manufacturers of builders' hardware, for which the Oregon Hardware Co. is the local agent, have copyrighted the name "Ruswin" to distinguish their line.

Mechanical Hoists

One of the articles of progress of the mechanical equipment that comes in to relieve the burden of hard physical labor in building is the mechanical hoist, a power hoisting apparatus for conveying building material from the ground to the upper stories of the building.

These have already received a fair amount of attention from the builders of large buildings, those which run more than two stories high, but many a carpenter and contractor specializing in residences might also help himself and add to his profits by taking up with something of this kind.

The trouble with the average man doing comparatively small construction work is that he looks upon all of these things as being within reach only of those big contractors who handle the large undertakings. This is an idea that should be gotten rid of, because in this work, as in woodworking machinery, there has been a lot of special attention given lately to devising equipment expressly for the lighter work, portable equipment that can be easily moved from one place to another, and even still lighter equipment that is operated by hand.

The gasoline engine and the electric motor have made practical many things in light power driven hoists, and the ingenuity of mechanics has also made possible several improvements in hand power hoists that will do much to lessen the burden and insure the safety of handling material from the ground up on to the building, and a really progressive builder cannot afford to let these things pass by without investigating.

Performance of Building Contract

By W. J. STANTON

Where, by the terms of an entire contract, one is to build a house for another, within a given time and for a gross sum, he cannot recover anything until full performance on his part. In such cases performance is to precede payment and is the condition thereof; and the fact that the building is accidentally destroyed by fire or otherwise just before its completion, and without the fault of either party, does not change the rule. There can be no recovery before an acceptance of what has been done.

The same rule applies to a contract under which materials are to be furnished or put into a building where it is destroyed by fire, or otherwise, before the contract is fully performed. The loss falls upon the contractor and not upon the owner, for a contract to furnish materials and perform work in the construction of a building as an entirety, and no part of the work is regarded as being done or material furnished until the whole contract is complete.

A contract to build a house in which it is stipulated that the entire work is to be completed before any part of the compensation is demandable, is an entire contract. A workman can recover nothing under an entire contract for the building of a house which is destroyed by fire before its completion; but it is otherwise if the contract is not entire. A contract to erect a house for the cost of the labor and material, with a certain per cent of the total cost added as compensation to the contractors, payments to be made as the work progresses and the balance on completion, is entire, although there is no specific sum mentioned as the contract price. The payment of money by installments for the convenience of the contractor does not necessarily affect the entirety of his contract to build and deliver a complete house. Hence, if the building is destroyed by fire before completion, he cannot recover an installment not due him.

On the other hand, if it is expressly provided in the contract that the last installment is not to be paid until the completion of the building, it cannot be recovered where the whole work is consumed by fire without apparent fault of either party, before its completion. In a California case the plaintiff agreed to repair an old house and to build a new addition thereto to be attached to it. The old house was to be turned, removed from its old foundation and placed on a brick foundation, to be laid under both the old house and the new addition. There was nothing in the contract by which the price to be paid for any part of the work or materials could be distinguished from that to be paid for any other part. A provision in it that the third installment should be paid when the building was completed according to the agreement and specifications was construed as referring to the whole building, including the old part and the new addition, and the contract was therefore held to be an entirety.

A contract to erect a building for a certain price, payable in installments, is an entire contract, and a destruction thereof by fault of the builder gives the owner a right to recover all installments paid. A latent defect in soil does not excuse a contractor from erecting a house which he has covenanted to build.

One party to a building contract cannot be compelled to accept work not performed according to the specifications, and to rely on recoupment for his indemnity. It is a good defense, in an action for work and labor done

in the building of a house on another's land, that the work was done in such negligent, unskillful and unworkmanlike manner as to be of little or no value to the owner of the premises. Upon the same principle, if the owner of a house and land agrees to sell and convey it, upon the payment of a certain price which the purchaser agrees to pay, and before full payment the house is destroyed by accidental fire, so that the vendor cannot perform the agreement on his part, he cannot recover or retain any part of the purchase money. Therefore, where the plaintiff contracted to sell and convey to defendant a farm having buildings thereon, and to deliver a deed in "fee simple of said premises" upon the payment, by defendant on a day named, of the price stipulated, and before the day named and the tender by the plaintiff of the deed, the buildings on the premises were burned, and the value of the premises greatly reduced thereby, it was held in Massachusetts that the plaintiff could not maintain an action upon the contract.

As exceptions to the rule that there can be no recovery upon a building contract until the work is done according to agreement, it may be stated that the general rule does not apply where unfinished work has been accepted, or has been used by and is of benefit to one of the parties, and that a recovery may be had upon a divisible contract. Thus, if the owner clearly accepts the property when nearly but not entirely completed, any loss occurring thereafter must fall upon him. Where the owner has accepted the building in its approximately completed condition, and is using it for the object for which it was built, the law implies a promise on his part to pay what the work done is reasonably worth.

The question of acceptance, however, is a very delicate one. The mere fact of an owner's taking possession of his own land upon which buildings have been erected, or where repairs have been done or alterations made to a building thereon, does not afford an inference that he has dispensed with the conditions of a special agreement under which they were built, or of a contract to pay for the work actually done according to measure and value. A builder cannot recover unless he has complied with his contract, and it is held in New York that this is true, although the defendant has taken possession of and uses the building, as this is not necessarily a waiver of failure to comply with the conditions of the contract.

In a Massachusetts case there was a contract to repair a house and outbuildings for a certain sum, but when the repairs on the house were nearly completed the owner, by his tenant, entered and occupied it, after which the house and outbuildings were destroyed by fire. In an action for work done and materials furnished, the workman was held entitled to recover for the repairs done on the house when the owner took possession. The court recognized the rule that one cannot recover on a contract to do an entire piece of work for a specific sum unless the work is done, and therefore carefully stated that "the precise ground on which the plaintiff can recover in this case is, that when the repairs upon the house were substantially done, and before the fire, the defendant, by his tenant, entered into and occupied it, and so used and enjoyed the labor and materials of the plaintiff; and that such use and enjoyment were a severance of the contract, and an acceptance, pro tanto, by the defendant." To entitle a party to recover for part performance, or for performance in a different way from that contracted for, his contract remaining open and unperformed, it is sometimes held that the circumstances must be such that a new contract may be implied from the conduct of the parties to pay a compensation for the partial, or substituted performance, as the mere fact of partial performance being beneficial to a party is not enough from which to imply a promise to pay for it. Consequently it is held that if a builder fails to complete his contract to erect a house on another's land, or does not make the work substantially conform to the contract, the mere fact that the building remains on the land, and that the owner enjoys its benefits, he having no option to reject it, is not such an acceptance as will imply a promise to pay for it, in face of the fact that the special contract has not been performed.

As an exception to the general rule above stated, there have been cases allowing a recovery upon a building contract where it is divisible. If such a contract provides that the whole building shall be constructed for a certain sum, a specified portion of that sum to be paid upon the completion of the foundation walls, a second specified portion when the roof is on, a third specified portion when the plastering is completed, and the remainder when the house is completed, such payments are distinct and separate, and may be sued for as they mature. A building contract which is not an absolute one to do work at all hazards, but is dependent upon assumed and implied conditions which the other party is to perform but does not perform, is severable to the extent that a mechanic may recover for work done up to the time that the building is destroyed by fire.

If the performance of a building contract is prevented by acts of the other party, the contractor is entitled, of course, to recover the reasonable value of the work performed and materials furnished.

The doctrine that there can be no recovery on an entire building contract until the work is done is not the law of Texas. It has been held there that under a contract to furnish materials and perform labor in altering an existing structure, according to agreed specifications, with no provision as to time of payment, if the structure is destroyed by fire, without the fault of either party, when the work has been only party performed, the builder may recover for the work done. This case is opposed to the great weight of authority. The rule is just and founded in reason, for if he does not intend to bear the loss it is natural to presume that he will stipulate against it. The well recognized principle that, where one of two innocent persons must bear a loss, the law casts the burden upon the party who agreed to sustain it, or rather leaves it where the parties by their agreement placed it, applies in such cases.—From National Builder.

SHOWING SUPERIORITY OF BITULITHIC OVER OTHER FORMS OF PAVING

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The Editor will be pleased to consider contributions of interest to the readers of this publication. When payment for same is desired this fact should be stated. Self addressed envelopes must accompany all such contributions.

ADVERTISING RATES ON APPLICATION — TELEPHONE MAIN 5121

Current Items

Failure to receive illustrations promised for the August issue accounts for the lateness of the current issue.

Owing to the heavy demand for "sample copies" and the expense of publishing our magazine, we have decided to discontinue this practice. However, we will be pleased to mail current issues on receipt of the price.

Portland is the home of a new correspondence school which will teach you all about how to design and build a forty-story building by mail. There are only a million shares at one dollar per share. How many do you want?

The monthly meetings of the Portland Architectural Club will be continued in September. Alterations on the new quarters are progressing rapidly and it is hoped that the work will be completed in time for the first fall meeting.

Too bad the auditorium cannot be completed in time for the Elks' National Convention.

The attention of architects is called to the competition for plans for the new auditorium.

We are of the opinion that Mayor Rushlight's step in asking for a statement of the resources and liabilities of the bonding companies doing business in Portland is a move in the right direction. Some bonding companies will bond contractors for any amount, irrespective of their financial or moral responsibility, merely to secure the small premium charged.

At the request of a large number of members of the Multnomah Amateur Athletic club, who were unable to obtain copies of the April issue in which the illustrations of their new clubhouse were run, we are showing them again in this issue.

Our Auditorium

We are to have our auditorium at last. It is to closely follow the St. Paul auditorium in general arrangement. The site chosen is the old market block. The Commission has retained Ellis F. Lawrence as professional adviser. The Board is to be congratulated upon securing a man of Mr. Lawrence's ability as its adviser. But, there is a fly in the ointment—in fact a couple of them. In the first place the site chosen is not large enough to allow the construction of the building required and in the second place we are of the opinion that the auditorium ought to be built on the East side of the river.

The construction of an auditorium which might adequately fulfill the requirements of today would not serve the same purposes of tomorrow. We all like to think of the time when Portland will be a city of at least half a million souls and fondly predict that that is a condition which is not far off. Precedents establish facts and it is a fact that the auditorium or meeting places of many growing cities have proven inadequate a comparatively short time after their construction. So that it behooves us to make progress slowly.

An auditorium should be primarily designed for a place in which public meetings of all kinds might be held. Not merely a convention hall. It should be located in a place most convenient for the greatest number of people. Sixty per cent of the present population live on the east side of the river and when the city obtains its hoped-for growth, this percentage will show a natural increase. Therefore, in our humble opinion, the auditorium should be located on the side of the river where it will be the most convenient for the people who have to pay the most towards its upkeep. It is and should be a pure question of convenience.

We believe the proper place for the location of the auditorium is one block east or west of Grand Avenue and between Ankeny street on the north and Hawthorne avenue on the south.

By all means let us be sure we are right before we go ahead.

R. A. Hume Sold Short-Weight Sand and Gravel, So Alleges Elwood Wiles

Elwood Wiles, paving contractor, and the Star Sand Company, one of the three organizations commonly referred to as the "sand trust," have each filed a suit against the other in the Circuit Court. The sand company demands judgment against the contractor for $3,649.77, alleging an unpaid balance of that amount. Wiles is requesting the court to find that he does not owe $3,649.77, declaring that the sand company gave him short measure.

Wiles declares that his action was brought for the purpose of clearing his credit, C. Mensinger, president of the Star Sand Company, having threatened to injure him with the banks.

"Subsequent to June 1, 1909, on which date the Star Sand Company, C. J. Cook Company and Nickum & Kelly combined and appointed R. A. Hume their agent, we were able to order only through Hume," said Mr. Wiles. "All orders were filled by the company which had its plant closest to the place of delivery. I was thus forced to take sand from the Star Company. The amount in dispute is the sum which I held out because of short measure. The wagons of the company carried only two cubic yards. I was charged at the rate of two and one-third cubic yards a load.

"Last Fall in the Municipal Court the company was convicted of giving short weight and the wagons are now carrying scantlings four inches in height around their outside rims, which allow the other third of a yard to be loaded."

Competition, says Mr. Wiles, sounded the death knell of the consolidation. Since the first of the year sand and gravel prices have declined 25 per cent, partly because two new companies, the Portland Sand Company and the Western Lime & Plaster Company, have entered the field, and partly because of an ordinance allowing washed-pit gravel to be used in place of river gravel if desired in street paving and sidewalk work.

State Capital to be Designed by Easterners

Olympia.—Wilder & White, architects, of New York, were selected by the Washington state capitol commission to have charge of the new $5,000,000 capitol to be built on the group plan, construction of which will be started within a short time. The first building will be a $350,000 temple of justice.

The commission held a competition and thirty contestants entered. The winner takes charge of the actual construction work.

The first money prize went to Howell-Stokes, of New York, who were awarded $1,000 in cash; the second prize of $750 was awarded to David J. Meyers, of Seattle; the $500 prize to Wilcox & Sayward, Seattle, while the $250 prize was won by Earnest Flagg, New York.

Those getting honorable mention were Gilbert Lorensburgh, San Francisco; Milton Lichtenstein, San Francisco; W. Marbury Somervell, Seattle; William K. Macomber, Seattle.

The decision of the commission, which was reached with the assistance of a board of three advisory architects, was announced by Governor Hay today, after the commission had spent four days doing nothing but examining plans. In each instance the verdict was unanimous.

Portland Fourth in United States in July Building Record

July building statistics compiled for 48 large cities representing all sections of the country, show an increase of 12 per cent over the figures for July, 1910. Chicago leads off with a gain of 115 per cent, which is equal to an increase of over $6,000,000. New York's gain was 20 per cent, or $2,500,000.

Portland's increase of 62 per cent was only exceeded by that of Chicago, Buffalo, New Haven and Omaha.

Particulars will be found in the following tables:

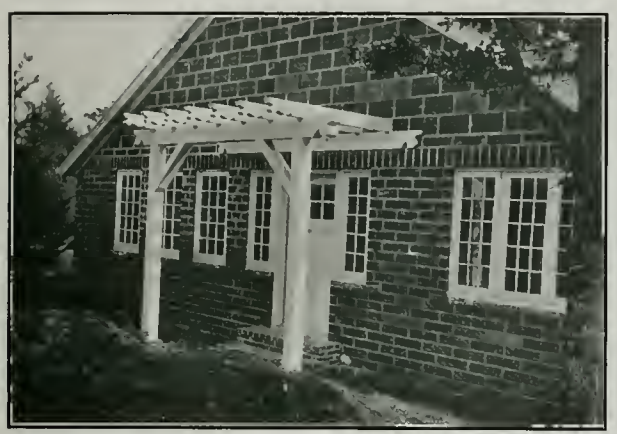
JULY PERMITS.

City.	July, 1911. Cost.	July, 1910. Cost.
Baltimore	$ 134,865	$ 753,404
Birmingham	294,513	305,039
Buffalo	1,626,000	893,000
Cedar Rapids	175,000	212,400
Chicago	11,300,000	5,253,200
Cincinnati	807,780	812,320
Columbus	483,215	313,778
Dallas	345,360	890,865
Denver	503,800	1,765,635
Des Moines	92,340	218,662
Detroit	1,958,100	1,556,665
Duluth	208,985	266,955
Evansville	231,785	84,352
Grand Rapids	324,775	242,080
Hartford	400,410	373,515
Indianapolis	571,500	890,500
Kansas City	755,896	1,584,465
Knoxville	99,238	68,412
Little Rock	149,745	131,176
Los Angeles	1,823,101	1,319,268
Manchester	110,555	113,275
Memphis	316,680	928,185
Milwaukee	956,477	1,176,390
Minneapolis	1,416,670	1,151,930
Nashville	175,500	203,320
Newark	718,105	729,202
New Haven	613,580	218,257
New Orleans	509,794	428,620
Manhattan	7,650,353	7,000,775
Brooklyn	3,674,250	3,394,893
Bronx	4,121,580	2,509,250
New York	15,446,183	12,904,918
Oakland	588,107	452,024
Oklahoma City	162,051	565,930
Omaha	1,234,025	463,975
Paterson	101,591	174,291
Philadelphia	4,289,070	3,462,665
Pittsburg	1,011,937	958,593
Portland	1,374,940	847,080
Rochester	741,538	550,336
St. Louis	1,363,066	1,976,350
Salt Lake City	247,400	443,400
San Francisco	2,134,479	2,334,790
Scranton	227,505	267,308
Spokane	153,500	403,020
Seattle	541,600	1,655,495
Toledo	254,385	159,397
Wilkesbarre	173,902	216,138
Worcester	379,092	281,227
Total	$57,146,813	$51,126,647

A Hollow Tile Cottage

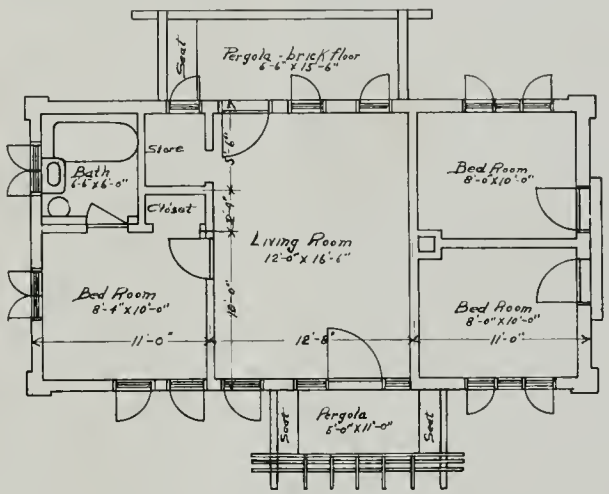
The use of hollow clay tile for residence construction is rapidly sweeping over the country, and is meeting with merited approval wherever it has been used.

In this number we illustrate a hollow clay tile cottage recently completed on one of Tacoma's well known Gravelly Lake country places.



This attractive five-room cottage complete, ready to move into, cost $1490. The foundation was built of 9x9x16 inch hollow clay building blocks; the first story of 4x8x16 inch hollow tile laid up into an 8 inch wall, and the gables are 4x8x16 inches, laid on edge into a 4 inch wall. The partitions are 3 inch tile. There is no basement, and the floors and roof are of wood. Contrary to the usual practice (which is less expensive) the tile is smooth on the weather exposed side, and is not stuccoed, being carefully pointed up. The reddish gray tile, white mortar and trim, and green roof makes a very harmonious color combination, set off by the oak grove in which the cottage is set.

The floor plan shows rather an unusual arrangement, two bedrooms being entirely without connection to the rest of the house. The cottage was built to house a farmer, his wife and two laborers, consequently the arrangement as shown. It has been found that this attractive design could be adapted to a cheaper house that would still be attractive and more roomy. Built in the city where a twelve-mile haul by traction line and a half-mile haul by team were unnecessary, the house could be built for $1200, using six-inch tile walls, tile partitions and stuccoed exterior. About $100 additional would suffice to put on dormer windows and to finish up the second floor for occupancy. These costs show that the tile house is very little, if any, more expensive than frame. The pictures show that any attractive design can be worked up in tile satisfactorily, and the tile itself makes possible a form of permanent construction which is sanitary, warm in winter, cool in summer and moisture proof.



Taking all these things into consideration, it appears that through the use of hollow clay tile it is now possible, in spite of the comparatively low cost of lumber in the West, to build permanent houses at low cost.

The architects for this cottage were Messrs. Russell & Babcock, and the tile was furnished by the Far West Clay Co. of Tacoma, Wash.

Huge Statute Planned for Bay City Fair

A heroic statue as colossal as the Statue of Liberty in New York harbor, and as significant in art, as all the sculptors in the world will be invited to compete in designing it, will be erected on the headland of Lincoln Park, fronting the Pacific Ocean and Golden Gate, according to the plans of the Panama Pacific Exposition directors.

The purpose of the statue is to symbolize California's greatness to the world. It is expected that it will cost about $600,000. It will be made of either bronze or cement.

The exposition directors say that artists from all parts of the country are enthusiastic over the plan and will compete with designs.

The First Iron Bridge

The first iron bridge ever erected in the world and which is in constant use at the present time spans a little river in the county of Salop, on the railroad leading from Shrewsbury to Worcester, England. It was built in the year 1778 and is exactly 96 feet in length. The total amount of iron used in its construction was 378 tons. Stephenson, the great engineer, in writing concerning it said:

"When we consider the fact that the casting of iron was at that time in its infancy, we are convinced that unblushing audacity alone could conceive and carry into execution such an undertaking."

The Importance of Finish Hardware

By C. G. JENNINGS

The item of finish hardware or builders' hardware, such as locks, butts and hinges, and which enters into the design and appearance of the building so much, to say nothing about the security employed by its proper use, is often little considered by the architects and owners.

Being a careful reader of different architectural editions, we have failed to notice an instance where this vastly important item has been given any place with the other details.

Only a short time ago it was thought impossible to make into metal a design other than plain flat plate, or possibly a slight bevel or scroll, and at that time it never seemed possible that the most minute detail of general architectural design of building could be worked into metal as it is today. The most delicate curve or effect can be produced in metal today that is used for the construction of locks, especially their exterior appearance that it is possible to bring out even with the brush. The average owner, builder or architect will, so many times, upon being asked their judgment about the design of the locks that should be employed on the home, answer: "Oh, give me anything plain." Or, still worse, making a selection that does not conform with the idea or architectural effect of the building at all.

Today it is possible to secure a coupling of glass with the metal which makes a very pretty combination for door trim as well as substantial. Glass knobs are often employed with the plate escutcheons, but more frequently where glass knobs are used they are connected to the locks by roses instead of the plate escutcheons and a small key plate is employed to give the proper effect. Glass knobs can be had in as many varieties as glass is used in any of the arts.

The unanimous use of brush brass or old brass causes practically 75 per cent of the sales to be made in that finish. The recent popularity of Mission or Colonial design has caused plain bevels or curved lines to be selected to match that particular design.

From the bungalow builders which have gained such popularity in Southern California we have a demand for large handle or latch sets, often designed in some such quaint artistic way as is suggested by the ancient work of he Aztecs. The main idea of these designs seems to be plain with odd shaped etchings, which although worked in regularity on the plate are each of a different size, so that no two etchings are alike.

The plainer lines of finish hardware are gradually giving way to designs having the cold hard lines of the plain goods, but with some decorations in the top and bottom of the escutcheons.

Since finish hardware is the "jewelry of the home," it adds more to its exterior and interior appearance than any other item. Let us be more careful in our selection of same, and look not so closely to the item of cost that we will hesitate to put $50 into good substantial hardware when we have gone so far as to pay out $5000 for other materials.

Bacon Will Design Memorial

Henry Bacon of New York has been selected by the Federal Fine Arts commission as designer and artist for the $2,000,000 memorial to Abraham Lincoln in Potomac Park, Washington.

The Bonding Company Responsible

Among contractors and architects the question is often heard, "Can he get a bond?" and in nine cases out of ten the answer will be in the affirmative, regardless of the fact that the contractor referred to has bid a price so much lower than the next bidder that his bid is absolutely unreasonable. And yet he can get a bond. Why? Because the majority of the bonding companies will take a chance and write a bond without investigation, regardless of the financial and physical responsibility of the contractor whom they are bonding. What is the result of this chance or gamble? Let us take one case out of the many which are happening every day.

To begin with, a man wishes to improve a piece of property with a building for which he is willing to pay $150,000. He goes to his architect and gives him his idea of what he wants, the architect is guided accordingly and plans the building to cost not more than $150,000.

Upon completion of plans various contractors are invited to bid on the work and a certain time set for opening the bids. And at the time set, as a general rule, you will find an average of three to ten representatives of bonding companies present. The bids are opened and they range in price from $112,000 to $168,000, the low bidder being $25,000 to $30,000 below the next bidder and the owner feels highly elated over the fact that he is going to save approximately $35,000 on his building. He says to himself: "I am protected. One of the requirements of the specifications is that the low bidder must furnish a bond in some responsible bonding company for at least 50 per cent of the contract price." But wait, the owner has something coming.

After the bids have been opened and read the low bidder rushes back to his office and checks over his estimate to see what he has left out, but it is too late now and he has a certified check for 10 per cent of his bid in the hands of the architect as a guarantee that he will furnish a bond and meet all the requirements of the specifications. But what is he going to do? He can not afford to forfeit his check, and he has only a short time in which to make good. This predicament is causing him a great deal of worry and anxiety when the representative of the bonding company comes in. Mr. Representative introduces himself and states that he understands Mr. Contractor is the low biddder for the ..... building and his company would be very much pleased to execute the surety bond. While he is talking Mr. Contractor says to himself, "Here is a way for me to save my check, and maybe I will be able to squeeze through and break even, and if this company will write the bond I will take a chance. At any rate, it will give me something to do."

The application for the bond is made and the bond executed, the company taking cognizance only of the fact that the contractor had put up a certified check for 10 per cent of his bid, and therefore must be responsible. The contract has now been awarded and the building is rushed through to completion, the final inspection made, certificate issued and the building turned over.

And now the owner comes in for his share. A few days after the building has been turned over to him he is called upon by a material man who presents a bill for material delivered and used in the building. The owner refers Mr. Material Man to his architct. A sub-contractor presents a bill for the final payment on his contract and he also is referred to the architect, and these are followed

by others, all of whom are referred to the architect and by him referred to the general contractor. But they have been to him and can get no satisfaction. He can not pay these bills because he either lost money or broke even, which is the same thing.

The result is that liens and suits are commenced, and the bonding company will attempt to evade the issue as long as possible on technicalities and the fact that changes were made during construction which causes the owner considerable worry and in the end considerable money. He discovers upon investigation that he has a poorly constructed building; he finds he has inferior material and workmanship throughout, but he has got just what he paid for. Some people may say there is no occasion for this, as the architect represented the owner and should have seen that the work was done in accordance with the specifications, when the facts of the matter are that the architect advised him in the first place to pay a little more money, let the contract to a responsible contractor and get a better and more satisfactory job, but the owner could not get away from the fact that he was saving approximately $30,000 or $35,000. In the first place, he was willing to spend $150,000, and before he gets through with his liens and suits his building has cost him a good deal more.

To sum up, had the bonding company made a thorough investigation of the contractor, not alone as to his financial responsibility but also as to his capability to handle a contract such as he had undertaken, they would have saved themselves, as well as the owner, contractor and the architect, considerable time and money, but the facts are that the majority of the bonding companies will gamble at long odds, to get the premium, which in the end is only a mere pittance.

Experiences of this kind have a tendency to work a hardship on the building business and everyone connected with it.

Dock Engineers Secured

It has been announced by the Public Docks Commission that C. W. Stanniford, E. P. Goodrich and William J. Barney of New York City, reputed to be capable harbor and terminal engineers, have accepted propositions made to plan the proposed local public docks system. It is said that as soon as $50,000 of the $2,500,000 bonds authorized are disposed of the engineers will begin work.

It is planned to have the engineers act as a board of consultation, and they will look over the field and, armed with the harbor survey and other data, will return to New York and there decide finally on the undertaking, forwarding plans and specifications to the commission.

Mr. Goodrich was formerly in the navy, having the rank of lieutenant, junior grade, and was assigned to quay, dry dock and other work in New York harbor. He served four years and resigned to take up special work. He constructed the Bush terminals in South Brooklyn. He is with the Jamaica Bay Improvement Company. Mr. Stanniford is chief engineer of the Department of Docks and Ferries of New York and has held the post ten years. He has designed important work undertaken by that municipality. Mr. Barney is deputy commissioner of the same department, and both studied European harbors a year ago in the interest of New York City.

Of Personal Interest

Potter & Merrill, of Tacoma, have opened a local office at Centralia, Wash., with J. M. Hitchcock in charge.

E. J. Baum, formerly with Jacobberger & Smith, with his brother, W. H. Baum, sailed for London on the 19th inst., where they expect to put in two years studying.

L. F. Brayton and W. N. Clist, formerly with the Stone & Webster Company, have formed a general engineering and contracting company.

E. E. McClaran has returned from his extended Eastern trip.

H. A. Dunkle, a ofrmer Spokane contractor, is now associated with the Warren Construction Company.

T. M. Hurlburt, former Assistant City Engineer, has been named as City Engineer by Mayor Rushlight.

J. M. Dugan, of the Sound Construction Company, Seattle, was a recent Portland visitor.

The warm weather was too much for the members of the Spokane Architectural club. The course of lectures which were to have been continued through the summer months have been postponed to the fall.

The Oregon State Board of Health has appointed Louis C. Kelsey Civil and Hydraulic Engineer, in an advisory capacity in matters relating to municipal water supply and sewerage construction.

The City Council of Corvallis has entered into a contract with City Engineer Beardsley for one year at a monthly salary of $150.

Frank C. Kelsey, 1200 Yeon building, has returned from Tacoma, where he prepared the plans for the municipal power plant and the gravity system for that city at an estimated cost of $2,000,000. Mr. Kelsey makes a specialty of hydraulic and municipal engineering and water plants.

Edward Taylor, Sales Manager for the Fort Wayne Engine and Manufacturing Company, of Fort Wayne, Ind., has opened an office at 804 Spalding building.

M. Malcolm, Manager of the Vancouver Hardwood Floor Company, of Vancouver, B. C., was a recent visitor to Portland.

Charles G. Badgley, architect, White building, Seattle, has opened an office at 319 Pender street, Vancouver, B. C.

W. H. Fayle, Manager glass department of W. P. Fuller & Company, has been on the sick list for the past three weeks.

George B. Van Waters, Vice President of the Hester System of store front construction for the Pacific Coast, visited San Francisco, Los Angeles and San Diego during the month of July. He reports business conditions in California improving with promising future. San Francisco, with her strategic position and indomitable determination, will make her record. Los Angeles is growing in every direction and growing substantially. San Diego is entering upon an era of prosperity. Before long she will be connected with two transcontinental lines, is putting herself in communication with the Imperial valley and is developing her water system. These things, together with her excellent harbor, which will be the first port of entry from the Panama canal, vindicate her hopefulness and expectancy.

Mayor Rushlight has appointed David L. Williams, Richard Martin, Jr., and E. E. Angel a committee to revise the new building code.

(Continued on Page 200)

Lumbermen to Combat Steel and Cement

At the recent convention of the Western Pine Manufacturers' Association held at Spokane the early part of the month considerable time was used in the consideration of ways and means of combating steel and cement as building materials.

Secretary Cooper of the association read some statistics showing the inroads made in eastern states by other materials in supplanting lumber as a necessary article in construction work, and the growth of this substitution is what the lumber men seek to combat.

The question of substitutes for lumber and how best to combat them was the subject of a paper by Everett G. Griggs of Tacoma, President of the Pacific Coast Lumbermen's Association.

He favored the adoption of some plan of advertising as the best means of combating this inroad into the business. The discussion lead to a review of the manner in which the retail business is handled, particularly in the east, and much of the trouble of the lumber manufacturers was laid at the door of the middlemen.

Griggs favored the levy of an assessment of $100,000 on the lumber industry of the country to combat the steel, cement and paper men, who have been pushing their wares at the expense of lumber.

J. P. McGoldrick favored the idea of an advertising campaign, but believed that before any action is taken by the association the matter should be submitted to all of its members. This plan was adopted and the secretary was instructed to get an expression from the members and report back at the next meeting.

President Hawksett said that the western lumber dealers had gone to sleep, as it were, and gave the retailer a full rein in dealing with the consumer. He believed the retailer had then grown too strong in his demands for profit and that this had caused much of the substitution of other materials for lumber.

"In the middle west they are telling that the lumber industry is giving out, when, as a matter of fact, the industry is but as yet in the infancy of its development," said the speaker.

Kenneth Ross of the lumber department of the Anaconda Copper Mining Company, believed in the idea of the Standard Oil Company, which guards its own retail field. He told of the case of the Coast lumber dealer selling his product at $18 per thousand and afterward seeing the same retailed to the farmers of North Dakota by an enterprising retailer at $45 per thousand. Ross said that the only thing to do was for the lumber manufacturers either to regulate the middlemen or go into the retail field themselves.

E. F. C. Van Dissel, Spokane, said that the lumber manufacturers are not the rulers of the industry, but rather are ruled by the retailers, who, he asserted, are at present masters of the situation. On his motion, the chairman appointed a committee consisting of Kenneth Ross, B. E. Willis and C. P. Lindsley to see what could be done in better regulating the retail lumber business.

President Griggs of the National Association made a plea in behalf of curtailing the output of the mills of the Inland Empire, as is being done by the manufacturers on the Coast. He said that the Inland Empire mills had a stock of 25,000,000 feet greater than a year ago and that in the Kalispell district the stock is 7,000,000 larger than a year ago.

Lumbermen who attended the meeting were:

R. M. Hart, Blackwell Lumber Company, Coeur d'Alene, Idaho.

A. C. White, A. C. White Lumber Company, Laclede, Idaho.

G. Myers, Dover Lumber Company, Dover, Idaho.

B. H. Hornby, Dover Lumber Company, Dover, Idaho.

P. M. Lachmund, Potlatch Lumber Company, Potlatch, Idaho.

R. G. Keizer, Panhandle Lumber Company, Spirit Lake, Idaho.

F. A. Schultis, Bonners Ferry Lumber Company, Bonners Ferry, Idaho.

E. F. Cartier Van Dissel, Sawmill Phoenix, Spokane.

A. M. Rogers, Blackwell Lumber Company, Coeur d'Alene, Idaho.

H. M. Strathern, Post Falls Lumber and Manufacturing Company, Post Falls, Idaho.

C. H. Fancher, Milwaukee Land Company, Spokane.

B. F. Pierce, Winslow Lumber Company, Winslow, Wash.

J. P. McGoldrick, McGoldrick Lumber Company, Spokane.

B. E. Willis, Fidelity Lumber Company, Newport, Wash.

A. L. Flewelling, Milwaukee Land Company, Spokane.

G. U. Bacon, Craig Mountain Lumber Company, Spokane.

Kenneth Ross, A. C. M. Company, Lumber Department, Bonner, Mont.

F. L. Soare, Hope Lumber Manufacturing Company, Hope, Idaho.

E. O. Hawksett, Panhandle Lumber Company, Spirit Lake, Idaho.

E. Enoch, Standard Lumber Company, Deer Park, Wash.

J. P. Reardan, McGoldrick Lumber Company, Spokane.

J. P. Knapp, forest service, Portland, Ore.

P. R. Hicks, forest service, Missoula, Mont.

Harold R. Morse, Harold R. Morse Company, New York City.

K. L. Frazer, Spokane.

Everett G. Griggs, St. Paul and Tacoma Lumber Company, Tacoma, Wash.

B. F. Cole, Lumber Review, Kansas City, Mo.

J. E. Fredrickson, chief inspector, Spokane.

George M. Cornwall, the Timberman, Portland, Ore.

F. H. Gilman, American Lumberman, Seattle, Wash.

C. P. and E. A. Lindsley, Carbolineum Treating and Paving Company, Spokane.

E. A. and C. P. Lindsley, the Lindsley Brothers Company, Spokane.

An Interesting Ruling

Judge Harris, of Eugene, recently made a ruling which will prove of interest to the building trades. The suit of J. J. Stines, of Portland, against the Gamma Delta Gamma Sorority was won by the contractor.

An interesting point in the case was the dispute over the hardwood floor, wherein it was decided that ½-inch flooring was all the same as ⅝-inch flooring, according to custom. This will establish a precedent for future cases. It seems that half-inch flooring was laid in the sorority house when the contract specified ⅝-inch boards. When boards are planed an eighth of an inch is removed, and in order to have the contract specify the ⅝-inch boards, it would have been necessary to have specified "⅝-inch full."

Front Elevation, Residence for Mr. J. D. Tresham
Mr. D. L. Williams, Architect, Portland

Living Room, Residence for Mr. J. D. Tresham
Mr D. L. Williams, Architect, Portland

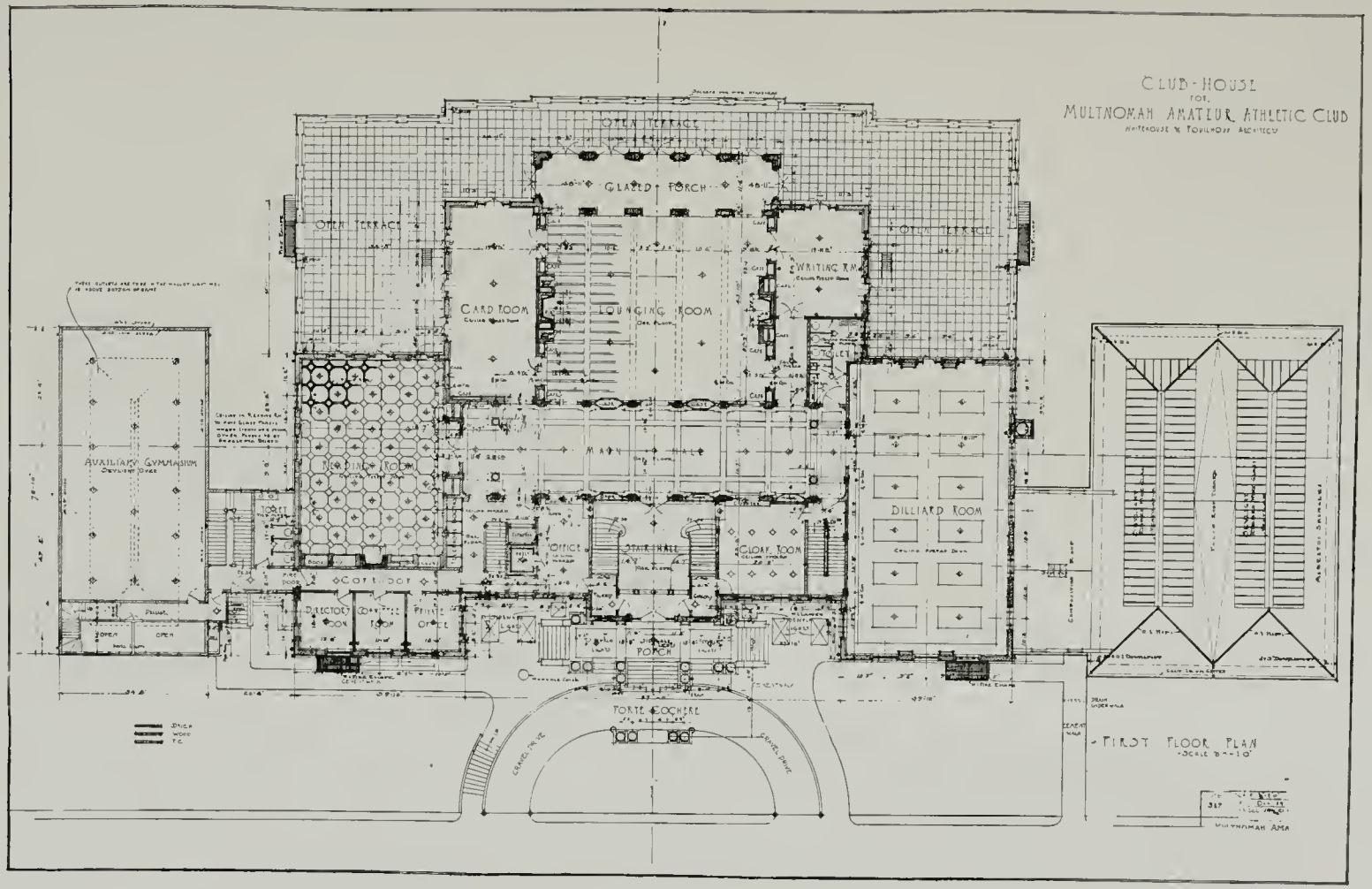
Side Elevation, Residence for Mr. J. D. Tresham
Mr. D. L. Williams, Architect, Portland.

Side Elevation, Residence for Mr. H. A. Conner
Mr. Ellis F. Lawrence, Architect, Portland.

Living Room, Residence for Mr. H. A. Conner
Mr. Ellis F. Lawrence, Architect, Portland.

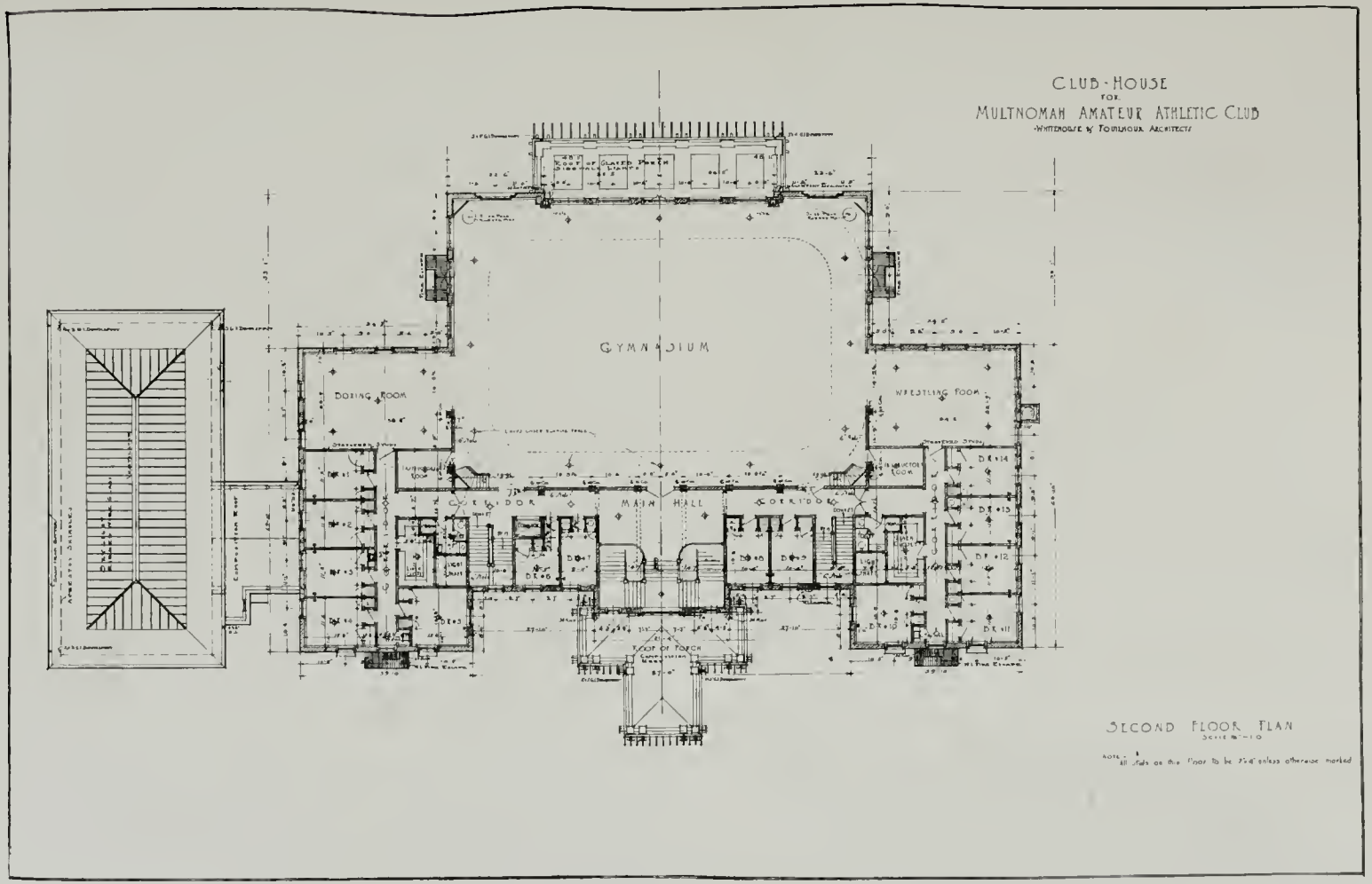
Dining Room, Residence for Mr. H. A. Conner
Mr. Ellis F. Lawrence, Architect, Portland

Club House, Multnomah Amateur Athletic Club
Whitehouse & Fouilhoux, Architects, Portland



First Floor Plan, Club House, Multnomah Amateur Athletic Club
Whitehouse & Fouilhoux, Architects, Portland

PACIFIC COAST ARCHITECT
AUGUST, 1911



Second Floor Plan, Club House, Multnomah Amateur Athletic Club
Whitehouse & Fouilhoux, Architects, Portland

PACIFIC COAST ARCHITECT
AUGUST, 1911

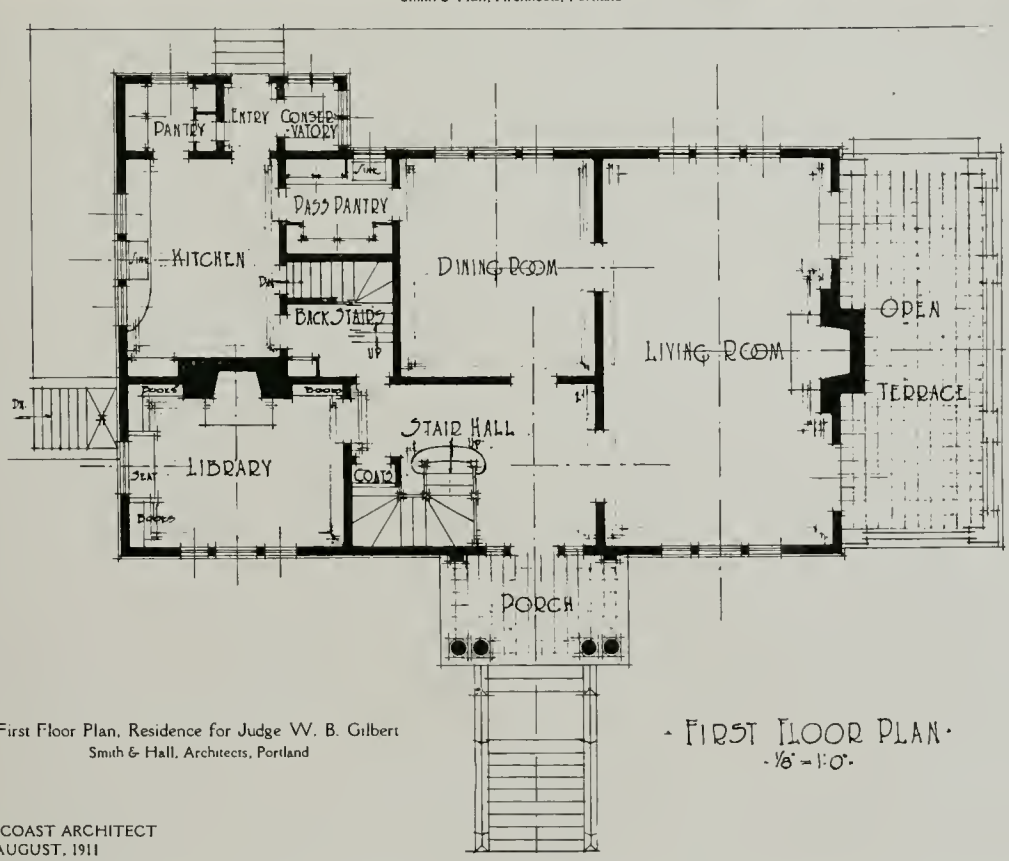
Front Elevation, Residence for Judge W. B. Gilbert
Smith & Hall, Architects, Portland

Stairway, Residence for Judge W. B. Gilbert
Smith & Hall, Architects, Portland

Corner of Library, Residence for Judge W. B. Gilbert
Smith & Hall, Architects, Portland

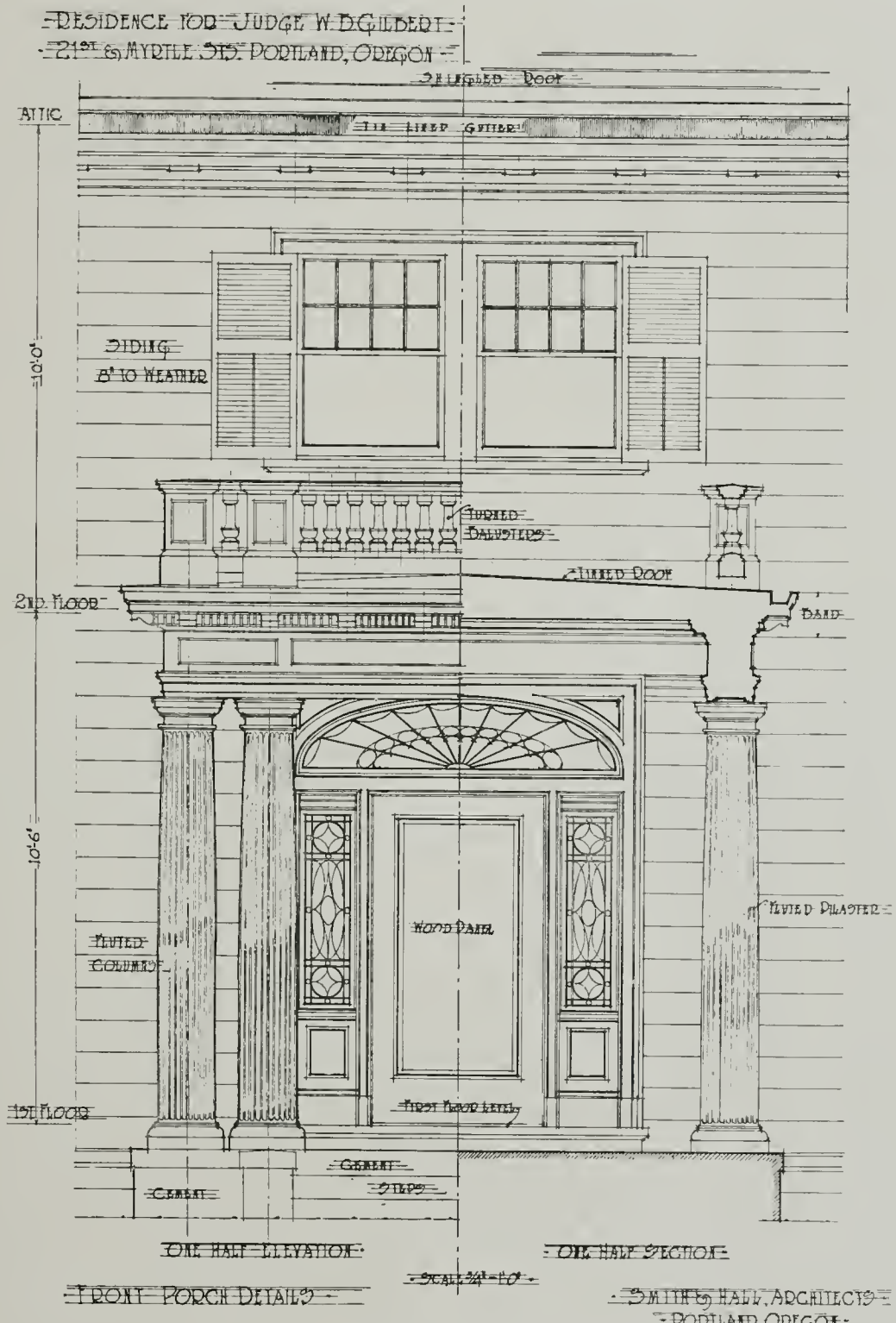
Living Room, Residence for Judge W. B. Gilbert
Smith & Hall, Architects, Portland

Dining Room, Residence for Judge W. B. Gilbert
Smith & Hall, Architects, Portland



First Floor Plan, Residence for Judge W. B. Gilbert
Smith & Hall, Architects, Portland

- FIRST FLOOR PLAN -
- 1/8" = 1'-0" -



Front Porch Detail, Residence for Judge W. B. Gilbert
Smith & Hall, Architects, Portland

PACIFIC COAST ARCHITECT
AUGUST, 1911

The Evolution of the Bed, Its Modern Development and the Bedroomless Future

By S. B. COOKE

Modern civilization seems to be laboring in the direction of bringing humanity into closer contact, requiring (as progress goes on and land values become higher) more and more compact quarters in which to live. This condition at its best is deplorable, but modified greatly by the many new customs and numerous unique improvements.

It has been said "Necessity is the mother of invention," and when one considers the crude methods in vogue a few years ago, with humanity struggling to successfully meet and attempting to overcome the variety of inconveniences, the growing unhealthfulness and the numerous difficulties rapidly created by a constantly increasing congestion of city life, then it is not astonishing that the old proverb should apply itself in this line with force and put into activity the mechanism of gray matter enveloped by the human cranium to solve and conquer the demands of new and ever-changing conditions.

To illustrate this statement and to demonstrate the

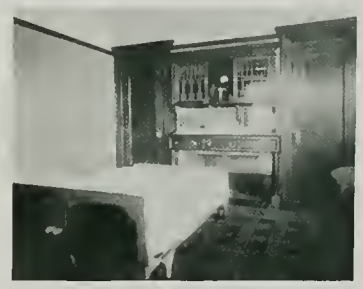
DURING THE DAY

tremendous strides made in one decade and the great application of mentality required in all avenues of improvement in the field of development (working out the innumerable details in the different departments) before a degree of perfection could be attained, draw a picture in the mind's eye of a city of high buildings crowded together and remove from it all modern improvements—the sewer system, the plumbing and plumbing fixtures, the modern sanitary precautions, the elevator, the street railway, the gas and electric lights, the modern paved street, the steam heat, with numerous other improvements; it is then seen at once that such a city at the present time would be unfit for human habitation.

While, on the other hand, in spite of being crowded, the modern city abode with all its improvements (compared with the scattering method of a few years past) is destined (if cities continue to exist) to be quite as healthful, exceedingly convenient and very desirable, with the same amount of elegance, the labor and expense of maintenance reduced to minimum, besides enabling people to live closer to business centers, houses of worship, theaters, etc., yet occupying perhaps less than one-half the space of the average home of a few years past.

The writer, however, does not argue in favor of deserting the rural life; on the contrary, it is reasonably demonstrated to be the natural and the best, but the ambition of a majority seems to lead them to an adoption of the more artificial surroundings; as yet there seems to be no indication of the turning of the tide in this respect, and until such a time the cities will continue to grow larger and larger and, consequently, living apartments crowded into still smaller and smaller space; it naturally follows in this, as in all else, that the supply will be governed by the demand.

The problem of transportation has been solved; the problem of sanitation is under control; the difficulty of stair-climbing has been eliminated by the elevator; while last but not least of the important problems to be solved was the condensing of the home and the cumbersome flat without sacrificing comfort, convenience or elegance. The modern apartment house has come to the rescue, solving the problem of utilizing wasted space; in other words, the modern apartment house is one in which all the space is utilized all the time, and as this class of building generally occupies ground of high value, it should be laid out and so constructed that each piece of ma-



READY FOR USE

terial used brings its proportionate share of revenue to become a satisfactory investment.

This was impossible of accomplishment so long as a separate room in which to sleep had to be provided for every person, or every two persons, and for years experiments were carried on to overcome this seemingly insurmountable difficulty. In this, as in all other needs, ingenuity came to the rescue and a bed was invented that could be put out of the way and conveniently brought into the room or rooms ordinarily set aside for parlor or dining room, thus supplying the key to the situation, for by so doing each single room became as good as two, and hence each apartment require half the space to produce the same or better results, and the same sized building to produce from 25 per cent to 100 per cent more revenue, while the general health of the tenant is improved as the small, close, unhealthy back bedroom has been eliminated and the occupant is permitted to sleep in the largest and best ventilated room in the house, the parlor or the dining room. This is as it should be.

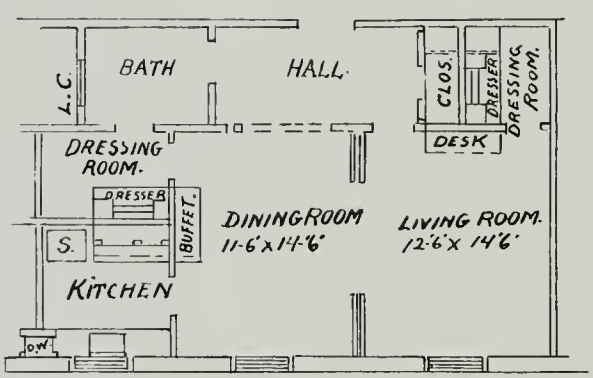
In the introduction of this system there were as usual a number of prejudices against the adoption of new ideas which had to be set aside; one by one, they have slowly died away until it resolved itself down to perfecting the disguise of the bed itself and making it convenient and easy to operate, and, in addition, providing a bed perfectly sanitary, subjected at all times to a current of fresh air.

In the invention of the disappearing bed it seems that every difficulty has been overcome, leaving it practically without criticism, not only from the standpoint of convenience, elegance and sanitation, but for economy of installation and utilizing heretofore wasted space.

The photographs illustrate the disappearing bed system—a sanitary bed ventilated by a continuous current of fresh air while not in use. This bed remains in a horizontal position, hence no lifting or pulling down from the wall is required, while with the slightest effort the bed is brought to any portion of the room (not being a fixture), thereby allowing the occupant without difficulty to sleep next to the window or the opposite side of the room, as may be desired. On arising the bed can be instantly rolled into the galvanized iron recess or box located underneath a closet, a bathroom or under a combination of fixtures, such as a cupboard in the kitchen and the buffet in the dining room, or dresser, writing desk and such like, thus taking up absolutely no valuable space, and when rolled into place it is so well disguised that there is no evidence of its whereabouts and the parlor, dining room or den is unmarred to fulfill its usual purpose.

The iron receptacle into which the bed rolls is dust and vermin proof and is connected with the outside air by one vent passing under the floor entering the recess under the bed, and another leading upward from the top of the recess between the studdings in the partition extending to the attic or roof, thus acting as a chimney drawing the air upward and sucking the fresh air in from the vent below, thereby the bed (as stated) is in a continuous circulation of fresh air.

By the installation of this bed a three-room cottage becomes as desirable and commodious as the ordinary five-room cottage, and a four-room cottage superior in accommodations to a seven-room, besides cutting down the housework and expense of furnishing from 25 per cent to 100 per cent, to say nothing of the cost of construction of building being reduced proportionately.



The plan shows a typical three-room apartment with two disappearing beds installed, making these three rooms equal in accommodation to a six-room flat, as it contains a double parlor, a single parlor, a dining room, two bedrooms, two dressing rooms, a kitchen, a private bath and a small reception hall, all in the space ordinarily, taken up by three rooms.

Trade Notes

W. J. Bland, local manager for the Sherwin-Williams Company, has returned from a two weeks' trip to San Francisco.

Olson & Company have just completed 31 water cooling refrigerators for the Hollman apartments, Second and Montgomery streets. The company are now manufacturing a refrigerator for private residences which can be iced from the outside.

The Western Clay Company has recently acquired the Diamond Brick Company and the Washington and Oregon Sewer Pipe Company and will use the yard of the latter, Front and Couch streets, as a retail yard, where they will carry in stock for immediate delivery sewer pipe and all classes of brick.

The Stone & Webster Engineering Company of Seattle has discontinued its Portland office.

Clifford, Ross & Company have opened a sheet metal works at 271 Hawthorne avenue. They are making a specialty of heating and ventilating.

The Central States Bridge Company has opened an office at Boise, Idaho, in order to better take care of extensive work being done in that locality by the company.

The exhibition of face brick laid up in wall units and mantels by the Shope Concrete Products Company at their show room, 13 East Water street, is something new to the Portland trade. The many colors and designs possible make a wide range to select from and while this is strictly a concrete product, it is an entirely new departure from the semi-dry products, in concrete, using a wet mixture in the facing, as used on the top of a good sidewalk, thereby filling the voids and securing perfect crystallization, making it possible to erect a building with waterproof face brick—the requisite for a sanitary building in this climate.

The Imperial Waterproofing Company will open a small factory at the foot of Seventeenth street for the manufacture of their product. H. Young is the local sales manager.

The P. L. Cherry Company has issued a brick catalogue showing the different sizes, colors and shapes of brick carried in stock. A copy will be mailed you on request.

The Newcomb Engineering Company is the local agent for the L. A. Norris Company of San Francisco.

The largest single contract ever let in the City of Portland was awarded the Warren Construction Company. The amount of the contract is $306,382.63 and is for the bitulithic pavement for Alberta district.

The Hessler Brick Company, located at 271 East Water street, has taken over the Perfect Brick Machine Company and will make a specialty of rock faced, plain and ornamental brick.

The recent reorganization of the Independent Sand and Gravel Company of Aberdeen, Wash., resulted in the election of Edward Spencer as President and Superintendent and L. G. Humbarger as General Manager.

The Kompolite Company of San Francisco has opened a Seattle office at 1158 Empire building, with H. S. Waterman in charge.

The Medford Builders' Supply Company of Medford, Ore., are now occupying their own building. The company make a specialty of office furniture and fixtures.

A very interesting machine is being introduced to building managers and contractors by the Western Sales

Company. It is an electrical device for grinding down terrazzo and mosaic floors, finishing hardwood and parquet floors and scrubbing and cleaning tile and marble. Two machines have already been placed and the above company looks for many sales to follow

Nitschke & Andrae, sculptors and carvers, 161 Union avenue, North, furnished the models for the marble and metal work and the ornamental staff work on the east wing of the Multnomah County courthouse. They also have the contract for the ornamental staff work on the People's Amusement Company's new theater, Park and Alder streets.

The Lithic Manufacturing Company, formerly located in the Heilig Theater building, has moved to 625 Yeon building.

Geo. B. Van Waters, Vice President of the Hester Manufacturing Company, of the Pacific Coast, has returned from a month's business trip through California and reports very good business, having placed several large orders for Hester System of store fronts. Dawn & Company will act as Los Angeles agents and T. M. Torsen for San Francisco.

Columbia Elevator Company, 254 East Sixth street, has installed automatic dumb waiters in the Wheeldon Annex apartments, electric dumb waiters in the Kingsbury and Ford street apartments, Multnomah County Poor Farm and Provincial Home at Oswego, Ore. Hydraulic elevators at Nineteenth and Northrup and Twelfth and Harrison streets.

Portland Tile and Mantel Company, 131 Eleventh street, has just completed the tile work in the Geo. A. Sears residence. Bathroom floor and walls, two mantels, floors in the sun room and vestibule. Floor and walls in the vestibule of the Zimmerman apartments, 32 bathrooms in the Pallay apartments, and has the contract to do the tile work in the Raleigh building, Sixth and Washington streets.

Barthold-Barg Company has moved from their old location at 251 Washington street to convenient and commodious quarters at 289 Stark street, where they have more room to make a display of their line of architectural and engineering supplies.

Portland Sheet Metal Company, 429 East Madison street, is now manufacturing a portable sheet metal garage and contractor's office. A sample garage will be found at the junction of Stark and Burnside streets.

Contracts have just been closed with the Harris Ice Machine Works of this city for the installation of a water-cooling plant in the Yeon building. The plant will consist of a four-ton electrically driven compressor with a circulating pump, ammonia condenser and storage tank, arranged to supply each office with cooled drinking water. Provision for cooling rooms in the basement for a restaurant has been made. This will make the Yeon building the only office building in the city equipped with a plant of this character.

The Jas. I. Marshall Manufacturing Company is placing the fixtures in the down town office of the Irwin-Hodson Company on Fifth street, the new salesrooms of Atiyeh Brothers at Tenth and Alder streets and the millinery establishment of Mrs. O. P. Wolcott, corner Eleventh and Alder.

J. C. Bayer & Company, Market and Front streets, have the contract for the kalamined windows, roofing, copper work on the west wing of the Multnomah County courthouse; tile roofing, copper work, terra cotta and national system of regulation and heating and ventilating of East Side library; roofing, copper work and metal windows in the Wilcox building; National system of regulation for the Rose City Park school.

H. Burt Reynolds, commercial photographer, 163 West Park street, is preparing 100 negatives for the Foster & Kleiser Sign Company, and 100 for the saddlery department of Marshall-Wells Hardware Company. Mr. Reynolds makes a specialty of architect's work of all kinds, photos for cuts and manufacturers' samples.

J. E. Murphy, who recently disposed of his tile factory at Salem, will build a new factory at Albany, Oregon.

The Clay Products Company will move their local plant at Clayton, Wash., to Spokane.

The Northwest Steel Company is fabricating 450 tons of steel for the Portland Railway Light and Power Company's new car sheds on Center street and 180 tons of steel to be used in the piers of the new Broadway bridge.

Kelley Brothers report the following new contracts for August: Hot air heating and fan system for the Sunnyside M. E. church; sheet metal work on the depots at Madras, Hunts Ferry and Farger for the Des Chutes Railway. They also report having closed contracts for the heating of 15 residences.

C. J. Dondero, of the Portland Cement Laundry Tray Company, reports that his factory is running at full capacity.

Parelius Manufacturing Company, 800 Multnomah street, have the contracts for the interior wood work on the Lipman-Wolfe building, Multnomah Hotel, Lincoln High School, Glencoe and Kern schools.

Portland Wire and Iron Works will install all the ornamental iron work on the west wing of the new Multnomah County courthouse, Pantages' theater, Multnomah Amateur Athletic club and rushing work on the Wilcox building, Sixth and Washington streets.

McNeil & Wallwork, architects, Swetland building, have recently received patent papers on a disappearing window frame that can be used in any class of buildings for either single or double windows of any size or thickness desired.

The Carmichael Company has completed outfitting the Reception Cafe, 255 Washington street, and the Alhambra Cafe in mahogany. The company is sending out notices notifying the trade that T. Depew is no longer connected, in any way, with them.

Galbraith & Telander, contractors of Spokane, have opened a Portland office at 801-2 Lewis building, with R. S. Fosburgh in charge.

I. M. Foster, of the Standard Wall Bed, of Spokane, was in Portland recently. The company will establish a branch office here.

The Oregon Hardware Company are conducting a slashing removal sale preparatory to occupation of their new quarters in the Worcester building.

High School Building Weakens

Grants Pass, Ore.—The new High School building that was finished this year is not up to the mechanical point of endurance. It is alleged that the contractors performed their part of the work, but that the architect did not make provisions for the heavy strains, and as a result the local contractor is going over the building with jackscrews and attempting to straighten up the places that are beginning to buckle in the roof. The plastering is falling off in a good many places owing to shrinkage of timbers.

Of Personal Interest.—*Continued*

R. M. Ardnt, of the Northwest Steel Company, has left for a three-weeks' trip through the Willamette Valley. W. F. Martin will take care of the local business during his absence.

W. S. Dinwiddie, a New York architect, who designed the Davenport Hotel at Spokane, was a recent Portland visitor.

W. W. Wixson, Manager paint department Marshall-Wells, Spokane, Wash., was a recent visitor to Portland.

E. A. Clark, of the Western Refining Company, has returned from his vacation.

C. R. Lewthwaite has added to his architectural practice by embarking in the automobile business. He has formed a partnership with T. A. Roots and will conduct a garage at Forty-ninth and Hawthorne avenue.

A. A. Arend, architect and contractor, has moved to Twenty-second and Brazee streets.

Bend Building Boom Continues

Bend, Ore.—Bend's growth has been most striking, according to figures compiled on building work done since the first of the year. These figures show that there have been completed and are under construction 54 residences and business buildings, the total cost of which is $85,000. Buildings of less than $500 valuation were not counted.

The business houses or additions thereto number 19. Among the number is a four-story flouring mill which, with machinery, cost $7,000. The machinery is being freighted in from Opal City. The mill will be ready for operation by October 1.

The residences are all of substantial character, including a number of handsome bungalows. A brick home is also in the list. It was constructed entirely of brick made here.

When it is considered that all the material used in these buildings, with the exception of the pine lumber, had to be freighted in from Shaniko, Madras or Opal City, the record is considered remarkable.

Building Continues Active at the Dalles

The Dalles, Ore.—In six months, that is from February 15 to August 15, permits have been issued by the city recorder for the erection of 47 dwellings and two business buildings, besides a permit for $25,000 improvements to a store building. The 47 dwellings range in price from $1,000 to $4,000.

Cement Brick Plant Ready at Gold Beach

Gold Beach, Ore.—A cement brick factory has been established in Gold Beach. George Stafford and D. M. Moore are the proprietors of the new enterprise and Reuben Ralph is the chief mixer. A few thousand bricks have been moulded and are drying and will be critically tested. If they stand the test it will be the aim of the owners of the machine to keep enough on hand to supply the local market.

Would Develop Clay Deposits

Coquille, Ore.—J. P. DeGessen, who lives down the coast from Bandon, has discovered large deposits of clay suitable for the manufacture of high class white brick. Mr. De Gessen is preparing to develop a brick business at Bandon.

A Resume

Recent items selected from the Daily Advance Reports of The Pacific Coast Architect.

Portland.

Apartment House. Architects Claussen & Claussen prepared plans for three-story brick apartment house to cost $20,000.

School Building. Architects Jacobberger & Smith prepared plans for eight-room reinforced concrete school house to be built at Rose City Park.

Warehouse. Architects McNaughton & Raymond prepared plans for warehouse for M. Seller & Co., to cost $35,000.

Residence. Architect & Builder C. H. Donahue prepared plans for residence for C. H. Chick to cost $20,000.

Brewery Addition. Architects Jacobberger & Smith prepared plans for the erection of three-story brick fire-proof addition to Gambrinus Brewery.

Residence. Architects Bridges & Webber prepared plans for residence for T. B. Reed on Portland Heights.

Store & Hotel Building. Architect D. L. Williams prepared plans for store & hotel building for E. J. Daly and J. G. Edwards.

Residence. Architect D. L. Williams prepared plans for residence to cost $40,000 for R. F. Lytle.

Apartment Bldg. Architects Swingle & Co. prepared plans for three-story apartment house for A. S. Ellis and J. B. Snyder.

Warehouse and Mill. Architects Bennes & Hendricks prepared plans for mill and warehouse for Wasco Milling Co. at The Dalles.

Hotel Building. Architects Emil Schacht & Son prepared plans for four-story brick hotel building for George and William Lawrence.

Armory. Architect Aaron Gould prepared plans for armory to be built at Salem at cost of $30,000.

Apartment Bldg. Architects Kroner & Henn prepared plans for apartment house for Mr. Kelty to cost $12,000.

Store & Office Bldg. Architects Claussen & Claussen prepared plans for store and office building for Mrs. Mary Wilhelm to cost $10,000.

Opera House & Business Bldg. Architects Goodrich & Goodrich prepared plans for three-story brick opera house and business building at Hood River to cost $30,000.

School Bldg. Architects Kroner & Henn prepared plans for school at St. Helens to cost $8,000.

Garage. E. Henry Wemme will erect garage at cost of $60,000.

School Addition. Steele & Bertelsen will erect addition to Kern school to cost $20,000.

Hotel Bldg. Spencer, McCain Co. prepared plans for five-story reinforced hotel bldg.

Residence. Architect Edward T. Root prepared plans for residence for Judge Gantenbein.

Alteration, Court House. Architect John G. Wilson prepared plans for altering Oregon City Court House at cost of $20,000.

Apartment Bldg. Architect Edward T. Root prepared plans for apartment bldg. for Mr. Frohman.

Hospital. Architect Robert T. Tegen prepared plans for hospital for Sisters of Charity to be built at Vancouver, B. C., at cost of $400,000.

Apartment Bldg. Architects Emil Schacht & Son prepared plans for four-story brick apartment house to be built at Roseburg for J. W. Perkins.

Hotel and Store Bldg. Leonard Construction will build four-story hotel and store bldg. for H. J. Ottenheimer.

Auditorium. Architect Ellis F. Lawrence has been named as Consulting Architect for the auditorium to cost $600,000.

Remodel Store Bldg. Architect David C. Lewis prepared plans for remodeling store bldg. at a cost of $20,000.

Remodeling Warehouse. Architect W. B. Bell prepared plans for remodelling warehouse to cost $20,600.

Municipal Bldg. Architects Lazarus & Logan prepared plans for two-story office bldg. for the Water Department to cost $25,000.

Warehouse. Architects Whitehouse & Fouilhoux prepared plans for four-story brick and mill construction warehouse.

Oregon.

Infirmary. Klamath Falls. Architect I. J. Knapp prepared plans for a new County Infirmary.

Library. Union. Architect H. G. Ellis, Spokane, prepared plans for Carnegie Library.

Masonic Temple. Medford. Masonic building being built at a cost of $40,000.

Library. Newberg. Architects S. E. Watkins & Son prepared plans for Carnegie Library.

Residence. Salem. Ex-Mayor Rodgers will erect thoroughly modern Colonial residence.

City Hall. Elgin. Plans prepared for City Hall building to cost $15,000.

Office Bldg. Albany. E. H. Rhodes will erect three-story brick office and store bldg.

Filtration Plant. Albany. Oregon Power Co. erecting filtration plant to cost $30,000.

Business Block. Burns. Plans prepared for two-story brick, stone trimming, business bldg.

School Bldg. Burns. Plans prepared for school house to cost $30,000.

School Bldg. Vale. Architect Chas. Burgraff, Albany, prepared plans for three-story brick school to cost $25,000.

Chautauqua Bldg. Ashland. A building will be erected at a cost of $20,000.

Postoffice Bldgs. Bills have been introduced for an appropriation of $100,000 for postoffices at Oregon City, Corvallis and Ashland.

Hotel. Vale. Plans prepared for forty-room hotel near Vale Hot Springs Bath House.

Water System. Pendleton. Engineer Frank C. Kelsey prepared plans for Water System to cost $200,000.

Asylum. Pendleton. State Architect Knighton prepared plans for a large branch asylum.

Federal Bldg. La Grande. The Campbell Building Co. will erect the Federal Bldg. Their bid was $51,675.

Garage. Medford. The Rau-Mohr Co. will build garage to cost $13,000.

Church. Eugene. The Methodist Church will erect a new bldg. at a cost of $100,000.

Seattle.

Garage. Architect John Carrigan prepared plans for two-story brick, concrete and mill construction garage to cost $28,000.

Residence. Architect John F. Everett prepared plans for residence to cost $7,000.

Garage. Architects Gould & Champney prepared plans for reinforced concrete garage to cost $10,000.

School Bldg. Architects Beezer Bros. prepared plans for Catholic School to cost $25,000.

School Bldg. Franklin High School will be built at a cost of $350,000.

Store and Office Bldg. West & Wheeler will erect two-story brick store and office bldg to cost $15,000.

Apartment House. Architect Robert T. Knipe prepared plans for three-story brick veneer apartment house.

Spokane.

Warehouse. The Pacific Transfer Co. erecting brick and concrete warehouse to cost $15,000.

Factory Bldg. The Spokane Asbestos Fire Brick Co. erecting factory bldg. to cost $30,000.

Lodge Bldg. Architect Frank Clapp prepared plans for Lodge Bldg. to cost $150,000.

Residence. James A. Watson will erect residence to cost $10,000

Apartment House. Architects Cowley & Rigg prepared plans for five-story brick apartment bldg. to cost $50,000.

Apartment Bldg. J. W. Close will erect five-story brick apartment bldg. to cost $36,500.

Business Bldg. Swift & Co. will erect four-story brick bldg. to cost $75,000.

Washington.

School House Addition. Tacoma. Architect Frederick Heith prepared plans for addition to Sheridan School to cost $30,000.

Machinery Bldg. North Yakima. State Fair Association erecting machinery bldg. to cost $10,000.

Y. M. C. A. Ellensburg. N. A. Jones awarded contract for Y. M. C. A. bldg. Bid $34,300.

Hotel. Zillah. Architects Weatherwax & Son, North Yakima, prepared plans for two-story brick and cement hotel to cost $10,000.

School House. Leavenworth. Architect C. F. White, Spokane, prepared plans for school house to cost $35,000.

School Bldg. Everett. Architect B. F. Turnbull prepared plans for school bldg. to cost $25,000.

Lodge Bldg. Olympia. Architect Samuel G. Ward prepared plans for Lodge Bldg. for the Knights of Pythias to cost $12,000.

Masonic Temple. Olympia. H. L. Ellsworth is erecting Masonic Temple to cost $20,000.

Church. Aberdeen. Architect G. B. Reis prepared plans for Catholic Church to cost $35,000.

School Bldg. Humptulips. Plans prepared for school bldg. to cost $12,000.

School House. Cosmopolis. Architect C. E. Troutman, Aberdeen, prepared plans for eight-room reinforced concrete school bldg. to cost $20,000.

Church. Cosmopolis. Architect C. E. Troutman, Aberdeen, prepared plans for First M. E. Church bldg. to cost $35,000.

Store Bldgs. Snohomish. Plans prepared for nine concrete store bldgs. to cost $30,000.

Hospital. Sedro-Woolley. Administration bldg. being built for Northern Hospital for the Insane to cost $115,000.

Business Bldg. Pasco. J. E. Doughty will build the Kerfoot bldg. to cost $22,000.

Business Bldg. Aberdeen. Powell & Cunningham will erect two-story frame business bldg. to cost $8000.

State Capitol. Temple of Justice. Olympia. Architects Wilder & White, New York City, prepared plans for Temple of Justice, the first of Capitol Bldgs. at a cost of $350,000.

Library. Wenatchee. Architects Blackwell & Baker, Seattle, prepared plans for two-story brick and stone library to cost $10,000.

Church. Walla Walla. Architect U. Grant Fay prepared plans for bldg. for the First Baptist Church to cost $40,000.

Idaho.

High School. Nampa. Plans prepared for two-story pressed brick high school to cost $70,000.

Hotel. Kellogg. Architect Robert C. Sweatt, Spokane, prepared plans for hotel to cost $27,000.

Business Bldg. Emmett. Plans prepared for four-story business bldg. to cost $40,000.

Capitol Bldg. Boise. The James Stewart Co. will erect the central section of the Idaho State Capitol. Their bid was $472,500.

University Bldg. Moscow. Architects Preusse & Zittel, Spokane, prepared plans for administration bldg. for the University of Idaho to cost $100,000.

British Columbia.

Business Bldg. Vancouver. Architect S. B. Birds prepared plans for four-story reinforced concrete bldg.

Residence. Vancouver. Architects Somervell & Putman prepared plans for brick residence to cost $10,000.

Warehouse. Vancouver. Architect Raphael A. Nicoles prepared plans for five-story brick and mill construction warehouse.

Rooming House. Vancouver. Architect E. E. Blackmore prepared plans for two-story rooming house to cost $10,000.

Apartment House. Vancouver. The Caledonian Investment Co. will erect three-story brick apartment to cost $35,000.

Apartment House. Vancouver. Architect F. H. Perkins prepared plans for three-story brick apartment house to cost $75,000.

Apartment House. Vancouver. Architect G. P. Bowie prepared plans for four-story mill and brick construction store and apartment bldg.

Store and Office Bldg. Vancouver. Architects Parr & Fee prepared plans for six-story reinforced concrete and brick store and office bldg.

Library Bldg. Victoria. Architect B. M. Rattenbury prepared plans for library to be built on the unit system at a cost of $750,000.

Office and Hotel Bldg. Victoria. The Norton-Griffiths Construction Co. will erect an eight-story office and hotel bldg. to cost $400,000.

School House. Trail. John Burns & Son will erect the brick and concrete school house to cost $40,000.

Hold Out on Contractors

Olympia, Wash.—All State contracts will hereafter contain a provision under which the contractor agrees to come under the industrial insurance act, and by which the State will each month hold out from contract estimates enough money to meet the tax called for by the omission.

"COMPETITION"

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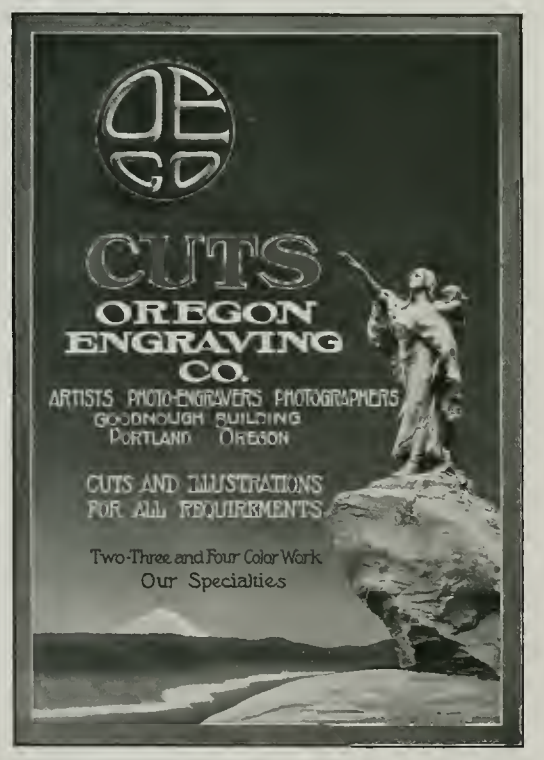

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The Editor will be pleased to consider contributions of interest to the readers of this publication. When payment for same is desired this fact should be stated. Self addressed envelopes must accompany all such contributions.

ADVERTISING RATES ON APPLICATION — TELEPHONE MAIN 5121

The illustrated section of the November number will be devoted to showing the results of the Auditorium competition.

Their own mistakes and those of others seem insufficient to demonstrate to some people the error of their ways. Municipalities are much like individuals in this respect. We believe the market site is not the proper location for the new auditorium, but only time will prove the soundness of our judgment.

That reminds us. Following the expression of our opinion on the advisability of locating the auditorium on the east side, we were "called," on the phone, by an unknown who embarrassed us by asking how much we were getting from the property owners on the other side of the river. Of course we refused to answer for fear of incriminating ourselves. The unknown one, refusing to give his name, informed us that he was a subscriber but that if we made another break of that kind he would withdraw his support. We shudder to think of the awful financial loss we would suffer if Mr. Man-afraid-to-give-his-name were to make good his threat, and promise in the future to have no opinions of our own. We simply cannot think of losing that two fifty per annum.

The closing date for the Auditorium competition is October 25th, but no communication will be received following the 4th of that month. At the present writing Mr. Lawrence reports that the Commission has not announced the Committee of Judges, but this will probably have been done before this issue reaches you. The competition has aroused conisderable interest among the architects, and we may expect the submitting of designs by many of the foremost members of the profession, both East and West.

On page 172 of the August issue we announced Portland as "fourth" in the building record for July. This was an error as was evident by a comparison of the figures given.

The building record for August as compared to the same month last year reveals Portland as a heavy loser, 32 per cent, and Seattle a loss by 24 per cent, while Los Angeles made a gain of 24 per cent and San Francisco a gain of 45 per cent for the same period. But even with the loss of approximately one-third, Portland is in sixth place among the cities recorded.

A comparison of the July and August permits issued in the Coast cities is interesting in the extreme. San Francisco, with a gain of 45 per cent over August last year, shows a gain of only $5000 over the July permits. Los Angeles, with a gain of 27 per cent for the same period, shows a gain of $60,000, while Portland, with a loss of 32 per cent, shows a gain of over $350,000, and Seattle, with a loss of 24 per cent shows a gain of over half a million.

The Builders' Exchange is rapidly increasing in membership. Secretary Danforth will be pleased to show you how it will prove to your financial interest to "come in." If your record is not good don't take the chance, for the Exchange is particular and only accepts responsible men. A membership means something to you.

Eight Months' Building Heavy—Nearly Half Billion Dollars' worth of Structures Erected

Official reports from forty-six cities throughout the United States, as compiled by the American Contractor, Chicago, shows an aggregate gain for August of 12 7-10 per cent as compared with August, 1910. This favorable showing is chargeable to the unprecedented boom in skyscrapers at Chicago, where the height limit is restricted to 200 feet, beginning with the first of September. Skyscraper permits involving more than $20,000,000 were taken out during the month, most of which will rise to a height of 260 feet. More than half of the cities listed show a loss of building operations varying from 7 to 60 per cent; others show a gain of from 1 to 288 per cent. Those cities scoring an increase of over 50 per cent are: Chicago, 288 per cent; Cincinnati, 104; Des Moines, 144; Hartford, 93; Little Rock, 151; Oakland, 98; Philadelphia, 16; Toledo, 61. Building operations for the first eight months of the year show a decrease of 5 per cent as compared with the first eight months of 1910. Particulars will be found in the following tables:

AUGUST RECORD.

City—	August 1911 Cost	August 1910 Cost	Per Cent Gain	Per Cent Loss
Atlanta	$ 629,384	$ 424,657	48	..
Baltimore	420,884	1,158,107	...	62
Buffalo	793,000	1,069,000	...	25
Chattanooga	66,356	86,428	...	23
Chicago	26,200,500	6,743,200	288	..
Cincinnati	1,420,000	695,250	104	..
Columbus	535,036	541,649	...	1
Denver	784,485	736,455	6	..
Des Moines	154,000	63,085	144	..
Detroit	1,668,875	2,499,880	...	33
*Duluth	278,910	10,195,140	...	97
Evansville	230,867	443,700	...	48
Grand Rapids	115,550	184,712	...	26
Hartford	530,095	274,545	93	..
Indianapolis	642,488	1,085,010	...	40
Kansas City	877,170	898,382	...	2
Knoxville	39,903	39,405	1	..
Little Rock	262,656	104,520	151	..
Los Angeles	1,760,776	1,378,586	27	..
Manchester	189,816	173,260	9	..
Memphis	422,850	374,665	12	..
Milwaukee	1,036,196	954,673	8	..
Minneapolis	1,042,800	1,370,605	...	23
Nashville	159,706	407,634	...	60
Newark	1,377,713	1,008,912	36	..
New Haven	843,065	467,163	44	..
Manhattan	6,542,885	8,106,268	...	19
Brooklyn	3,376,973	2,686,490	25	..
Bronx	2,143,275	2,847,495	...	24
New York	12,063,133	13,640,253	...	11
Oakland	744,533	374,297	98	..
Oklahoma City	250,400	313,374	...	20
Omaha	404,325	468,795	...	13
Paterson	145,177	266,795	...	45
Philadelphia	4,660,185	2,634,265	76	..
Pittsburg	1,138,531	1,355,399	...	16
Portland, Or.	1,733,325	2,556,875	...	32
St. Paul	797,116	1,138,461	...	..
St. Louis	1,631,519	2,316,169	...	29
Salt Lake City	351,900	292,200	21	..
Scranton	104,930	180,210	...	11
San Francisco	2,139,095	1,472,078	45	..
Seattle	1,100,280	1,457,745	...	24
Toledo	574,588	355,921	61	..
Wilkes-Barre	92,950	188,993	...	50
Worcester	549,838	602,967	...	8
Total	$ 70,997,911	$ 62,993,620	12	7

*Duluth, 1 permit, steel works, $10,000,000, Aug., 1910.

EIGHT MONTHS' BUILDING.

City—	Jan. 1 to Sept. 1 1911	Jan. 1 to Sept. 1 1910	Per Cent Gain	Per Cent Loss
Atlanta	$ 4,085,005	$ 5,460,632	...	24
Baltimore	6,792,769	7,625,371	...	10
Buffalo	6,457,000	6,668,889	...	3
Chattanooga	757,583	1,079,703	...	29
Chicago	74,891,600	57,857,200	29	..
Cincinnati	8,816,915	6,250,895	41	..
Columbus	3,361,272	3,325,354	1	..
Denver	4,428,160	3,892,230	...	48
Des Moines	1,154,214	1,019,918	13	..
Detroit	13,641,975	11,777,870	16	..
*Duluth	1,755,690	12,212,684	...	85
Evansville	1,462,168	863,725	38	..
Grand Rapids	1,515,243	1,673,429	...	9
Hartford	4,332,755	3,345,071	29	..
Indianapolis	5,714,484	5,605,471	19	..
Kansas City	6,607,241	9,967,346	...	33
Knoxville	442,562	399,526	10	..
Little Rock	1,339,379	1,098,197	21	..
Los Angeles	15,140,450	14,439,103	5	..
Manchester	1,104,989	921,811	19	..
Memphis	4,388,515	4,723,603	...	7
Milwaukee	8,257,961	6,865,683	22	..
Minneapolis	10,953,855	10,656,015	3	..
Newark	8,622,279	8,685,345	...	7
Nashville	938,914	1,281,159	...	27
New Haven	4,383,405	3,155,948	38	..
Manhattan	76,855,985	84,526,261	...	9
Brooklyn	27,090,908	28,943,428	...	6
Bronx	17,269,072	25,879,690	...	31
New York	121,215,915	139,349,379	...	13
Oakland	4,766,207	4,290,714	1	..
Oklahoma City	2,318,551	4,414,998	...	47
Omaha	4,125,908	4,086,013	9	..
Paterson	1,620,071	1,654,409	...	2
Philadelphia	31,941,015	28,369,960	12	..
Pittsburg	7,237,625	9,295,342	...	22
Portland, Or.	12,147,669	13,033,712	...	7
St. Paul	6,297,641	7,380,828	...	14
St. Louis	13,255,341	15,123,341	...	12
Salt Lake City	2,091,900	3,675,500	...	43
Scranton	1,132,164	1,555,735	...	27
San Francisco	15,200,215	16,031,514	...	5
Seattle	5,614,110	11,454,235	...	104
Toledo	2,786,128	2,115,879	31	..
Wilkes-Barre	1,503,773	1,376,105	9	..
Worcester	3,344,399	2,765,619	28	..
Total	$437,346,911	$461,705,572	...	5

A Severe Test

A new building material made its appearance in Portland this week when a test was conducted by Inspector of Buildings Plummer of Sullivan reinforced hollow tile, a product which has been used extensively for fireproofing in Western cities for the past four years. The test was given primarily for the purpose of determining qualities of the tile and was in accordance with the provisions of the new building code of Portland, which prescribed that all such materials before being used in this city must undergo a severe practical test to gain the term "fireproof."

Following the provisions of Mr. Plummer's test, a building 15 feet by 7 feet by 12½ feet high was built of the 4-inch tile and the same finished on both inside and outside with a coating of plaster one-half inch in thickness. The roof was made of the Sullivan 3-inch tile. To get the proper

Showing building forty minutes after fire started

draft for the fire two chimneys, 18x20 inches, were built of 3-inch tile at the rear end and a grating of steel rails placed over the floor surface two feet from the ground. A firing door and draft were also provided at one end. The test called for a fire to be started from dry wood built up four feet high over the grate and that the temperature should rise gradually to 1700 F., and be maintained at that temperature for an hour and a half. Mr. Plummer started the fire at 2:25 p. m., and the folllowing readings of temperature were obtained through a standard pyrometer:

Time of Reading.	Temp. Inside.	Temp. Outside.
2:25 Start.		
2:35	280 F.	70 F.
2:40	600	75
2:45	800	75
2:50	900	85
2:55	1100	85
3:00	1300	90
3:05	1400	90
3:10	1475	94
3:15	1475	96
3:20	1475	96
3:25	1600	98
3:27	1700	100
3:30	1750	100
3:31	1800	105
3:35	1775	105
3:40	1800	105
3:45	1720	100
3:50	1700	100
3:55	1730	102
4:00	1700	110
4:05	1720	110
4:10	1620	100
4:15	1700	100
4:20	1720	102
4:25	1780	112
4:30	1700	115
4:35	1780	115
4:40	1740	112
4:45	1720	115
4:50	1600	115
4:52 Water turned on.		

The test prescribed that the fire should be quenched with a regulation fire hose and nozzle under 30 pounds pressure and that the stream should be played on the walls for two and a half minutes.

At 5 o'clock at the order of Mr. Plummer, Capt. May of the Russell Street Station with his crew, turned the stream into the building, and besides fulfilling the terms of the test the stream was kept directly against one spot on the rear wall for a further minute and a half to demon-

After the fire and water test. Demonstrating unimpaired strength of roof and walls and showing in foreground steel grate rails warped and twisted by heat

strate that the strength of the walls had not been impaired by the fire. At the conclusion of the water test, the officials made an inspection of the interior of the building and found that the only damage done was the washing off of the finish coat of plaster on the rear wall.

No fire, smoke or water came through the walls, and to all appearances the building was as strong as before the fire.

Among the interested spectators at the test were City Inspector of Buildings Plummer, Fire Marshal Roberts, Fire Chief Laudenklos, Secretary McCune of the Board of

Fire Underwriters, and a number of architects, engineers and building construction men. Mr. Plummer stated that the test given was a severe one, and that the material is well adapted to buildings of the best class. Mr. McCune remarked that the tile had filled the requirements of the underwriters and was acceptable to him.

As a result of the test the following letter was received from the Inspector:

SULLIVAN TILE COMPANY,

801 Chamber of Commerce Bldg., City.

Dear Sirs—I wish to notify you that the test of Sullivan Reinforced Gypsum Tile, made on September 6th, in accordance with the regulations laid down by the Board of Appeal, was entirely satisfactory. This test, with a fire test at a temperature of 1700 degrees and over for one and one-half hours, followed by the water test, was severe enough to demonstrate very clearly that your tile will be satisfactory when used in the ordinary dividing partitions in fire-proof buildings, as the walls did not warp, bulge, or disintegrate, so as to be unsafe, and no smoke, fire or water came through the walls. Yours very truly,

(Signed) H. E. PLUMMER,
Inspector of Buildings.

Interior view of building after fire and water

The company handling the material on the Coast made all the tile in Portland that were used in the test, and is now establishing a factory here as well as maintaining factories in San Francisco, Vancouver, B. C., Tacoma and Salt Lake City. A contract has already been signed to install the partition tile in the new Lincoln High School. The machinery to be used in Portland is now on the ground and the factory, when in operation, will employ about twenty-five men. The tile is composed mainly of pure gypsum with other ingredients and is reinforced with a wire mesh. Besides having superior fire-proofing qualities, it is very much lighter than other materials used for partition construction, and thus reduces the dead load carried by buildings of steel frame and concrete construction. Sullivan Tile is also claimed to be sound-proof, which makes it of particular value in apartment houses and schools. J. D. Sullivan, the inventor of the tile, who conducted the test here last week, has just completed the installation of his material in the new Harriman passenger station in Seattle.

Trade Notes

W. P. Fuller Company is furnishing the glass for the new Multnomah Hotel.

G. H. Killits, formerly of San Francisco, has opened a manufacturers' agency at 520 Swetland Bldg., and will represent twenty-four different lines.

The Morrison Electric Company, 219 E. Morrison street, has been awarded the contract for wiring the Smith Hotel, Sixth and Main streets, and is doing the wiring in the residences of J. G. Mack, Charley Deyette and Judge Gantenbein.

The Pacific Iron Works has completed six 85-foot steel trusses and the iron roofing on the People's Amusement Bldg., W. Park and Alder. They will also furnish the steel and iron for the hotel building at Twelfth and Burnside streets.

The Harris Ice Machine Company, 174 E. Water street, has secured the contract for an hundred-ton ice machine to be installed for the Boise Cold Storage Co., of Boise, Idaho. This is an addition to the three machines already installed for the same company.

The Pacific Lumber and Mfg. Company reports 3,000,000 feet of Siberian oak flooring and lumber in stock. The company recently acquired 300,000 acres of virgin forest in the Fiji Islands, including walnut, mahogany and satin wood. It is the present intention to start a large veneering plant.

The Portland Sheet Metal Works is installing the Kalamein iron work on the Lincoln High School. The sheet metal and roofing on the grand stand of the Multnomah Amateur Athletic Club is progressing rapidly. The company also has the contract for the copper and sheet metal work and the roofing for the Healy Bldg.

The Portland Cement Laundry Tray Company, East Sixth and Main, is manufacturing for Mr. Holloway a concrete burial vault which will be absolutely waterproof and air tight.

The Shope Concrete Products Co., 130 East Water street, is furnishing the concrete face brick on the building at Twentieth and Washington streets.

The Portland Hardwood Floor Co., 286 Yamhill street, has completed floors for the Fritz Apartments, Warren Apartments, Clay Apartments and the American Realty Co. building. They also have the contracts for the new Multnomah Hotel, the Multnomah Amateur Athletic Club and the Lipman & Wolfe building.

The Western Refining Co., 351 East Oak street, report business extremely good and their factory running full capacity.

W. J. Gold, of Chicago, a representative of the Standard Manufacturing Co., of Shelby, Ohio, was a recent caller on the local architects and hardware dealers. Mr. Gold is on a visit to the Coast cities demonstrating the Standard checking spring floor hinge.

H. C. Foster, Vancouver, B. C., representative of the Hester Manufacturing Co. of the Pacific Coast, was a recent visitor at the home office in Portland. He reports many good sized buildings and labor conditions more settled. According to Mr. Foster his company is installing 90 per cent of the metal sash and store fronts in Vancouver.

Michael Spahn, president and manager of the Portland Elevator Co., has returned from a successful business trip in the Willamette Valley.

Lawrence Holmes, president of the Holmes Disappearing Bed Co., of Los Angeles, is taking care of the local office in the absence of S. B. Cooke, who is making a tour of the Eastern cities, including New York, Boston and Philadelphia.

I. O. Thompson, of the contracting firm of Sinclair & Thompson, has sold his interest to a Mr. Brown, of Chicago. The firm will be known as Sinclair & Brown. Mr. Thompson expects to go to Southern Oregon to develop his gold mine.

I. W. Schiffer, manager of the Lithic Manufacturing Company, 625 Yeon building, reports having placed his material in the following buildings: Installed the Scagliola wainscot and Racolith in the bathrooms of the Fritz Apartments and Racolith in all the bathrooms of the Wheeldon Annex Apartments, Racolith floors in the kitchen, pantry and bathrooms of the Hill Hotel, Racolith floors in kitchen Portland Hotel, and Scagliola in the vestibule of the Grand Oak Hotel.

Fred W. Wagner, 363 Stark street, has the contract for the tile work in the Fordham Apartments. There will be 44 bathrooms and the floors and walls are to be tiled. Also the contract for the tile work on the west wing of the Multnomah County courthouse. Has just finished the tile work in the Provident Hospital at Seattle. There were 23 cars of tile used in the latter building.

Victor S. Persons, local representative of the Concrete Steel Products Company, was a recent visitor to Seattle on business. Mr. Persons reports that his company will design the structural work and furnish the reinforcement on the Goode building, Seventh and Hoyt streets.

The P. L. Cherry Company have just received their advance samples of the Claycraft brick, "the brick with an individuality." Those interested are invited to inspect them at the office of the above.

The fireless cooker is an instrument that cooks food without fire. The fire department was called to the Columbia Hardware Company recently to extinguish a fire in the fireless cooker.

"Newberg red" face brick, manufactured by the Newberg Brick and Tile Company, has recently been furnished for the Christie Hall dormitory of Columbia University; the Nurses' Home, Second and Wood streets; the St. Andrews' parish, East Eighth and Alberta streets; the Old Folks' Home, East Eightieth and Division streets, and the Catholic school at East Fifteenth and Miller streets, Sellwood.

Big oaks from little acorns grow. From a small beginning in limited quarters the business of the Oregon Hardware Company has grown in leaps and bounds until it has become the busiest retail hardware store in the city. The company long ago outgrew their present quarters on Sixth street. In casting about for a new location they have succeeded in securing the lease of two stores on the ground floor of the Worcester building, on Third street, which are being remodeled for them at the present time. Fair prices, fair treatment and the best hardware the market affords are synonyms with the Oregon Hardware Company.

The Western Clay Company has recently procured the agency for the famous Denny-Renton Clay and Coal Company's building paver and is bringing these brick to Portland at a very low figure, which makes possible an attractive material for warehouses, garages and theater construction. The brick has been used extensively for many of the beautiful homes and garden walls in the Northwest.

The Newberg Brick and Tile Company has purchased a five-ton White auto truck for use in delivering brick in Portland and vicinity.

M. L. Kline, plumbing, mill and steam supplies, 84 and 86 Front street, is adding many new fixtures to his already exceptional fine exhibit in the display room. A passenger elevator is being installed and will be used exclusively for the display room. The central location of the firm makes it especially convenient for architects, contractors and the trade in general who wish to see the latest and best in plumbing supplies.

Thomas A. Frewen has invented and is selling a time-saving device for figuring radiation which was compiled from formuals used by heating engineers. The scale is absolutely accurate and is adapted for rapid figuring. It is being sold under the name of the Standard computing scale.

The Parelius Manufacturing Company has secured the contracts for the interior finish of the Frohman Apartments. New building, Reed Institute on Jefferson street, East Side library, Jackson building on Union avenue, People's Market at First and Taylor, Thompson garage, Lents school and Bjelland Apartments.

Washington Brick, Lime and Sewer Pipe Company is furnishing tan color matt glaze terra cotta for the Fernwood school; white matt glaze terra cotta for the Rose City school; terra cotta for the west wing of the courthouse; mission brick for the East Side library; granite brick for the Edmunds-Dailey building, and granite brick for the Dailey garage.

Our Illustrations

We have devoted our illustrated section this month to showing the results of the recent competition for the State Capitol Buildings to be erected at Olympia, Wash. The first prize was awarded to Wilder & White of New York City, who will receive the commission to design and supervise the construction of the Temple of Justice, to be built at an approximate cost of $350,000. The second prize of $1000 was awarded to Howells & Stokes of New York City; the third prize of $750 to David J. Myers of Seattle; fourth prize of $500 to Willcox & Sayward, Huntington & Gould and Charles H. Alden, associate architects, Seattle, Wash.; the fifth prize of $250 to Ernest Flagg of New York City.

Those receiving honorable mention were, in the order named:

G. Albert Lansburgh, San Francisco.
Milton Lichtenstein, San Francisco.
W. Marbury Somervell, Seattle, Wash.
William K. Macomber, Seattle, Wash.
J. A. Longe & Lawrence Ewald, St. Louis.

Olmstead Brothers, of Brookline, Mass., were employed by the Commission as landscape architects.

The Jury of Award was composed of C. H. Bebb, of Seattle, professional advisor; Kirkland K. Cutter, Spokane, and Wm. D. Faville, of San Francisco.

Plans Subway for San Francisco

Plans for a $4,800,000 subway to be constructed under a long stretch of Market street, San Francisco, were filed with the Board of Supervisors by John Pierce Hill, a civil engineer, who was connected with the construction of the subway in Boston.

Hill stated that the city could reimburse itself by charging street car companies an additional rent of ? per cent over and above the interest charges on the bond issue. He also stated that a syndicate of five San Francisco capitalists stood ready to carry the enterprise through, if the city would not.

Rubber nails for use in places where metal ones would corrode are a late German novelty.

Personal Mention

Architect W. E. Allen, of Los Angeles, spent a few days in Portland recently and will visit the Puget Sound cities before returning home.

Architect J. W. Reid, of Reid Bros., San Francisco, was a recent visitor in Portland. He reports building conditions improving in Frisco.

Architect Fred Claussen, of Claussen & Claussen, has returned from a ten days' vacation at Seaside.

Architect T. M. Goodrich, of Goodrich & Goodrich, recently met with a serious accident at Forest Grove, Oregon. While boarding a car it started, throwing him to the ground. He was confined to the Good Samaritan Hospital for some time but is now back at the office.

A. C. Jackson, of the Harriman System, has returned from a two months' trip through the Eastern and Southern states.

O. D. Bloom, local manager of the Brunswick-Balke-Collender Co., is spending his vacation on a hunting and fishing trip.

C. J. Dondero, manager of Portland Cement Laundry Tray Co., has returned from a business trip to Seattle.

I. H. Frank, local manager of the Waterhouse & Price Co., has returned from a business trip to Eastern Oregon and Idaho.

B. C. Jakway, of J. G. Mack & Co., has returned from a business trip to Seattle.

I. J. Galbraith, of Galbraith & Telander, was a recent visitor at the local office.

P. H. Carr, of J. G. Mack & Co., has returned from his vacation, spent at Seaside.

David J. Myers, of Seattle, President of the Washington State Chapter of the American Institute of Architects, has been selected as a delegate to the International Congress of Architects, which convenes next month in Rome, Italy.

W. R. Wilder, of the firm of Wilder & White, architects, New York City, the successful competitors for the plans for the proposed State Capitol buildings at Olympia, was a recent visitor in Seattle. Mr. Wilder stated that he expected to award contracts about the first of the year.

Architect Fitzherbert Leather, formerly practising at Gray's Harbor, has opened an office at 402 Walker Bldg.

City Engineer R. L. Brewster, of Prineville, Oregon, will spend his three weeks' vacation at his former home, Chicago.

C. C. Smith, sales manager of the Western Clay Co., was a recent visitor to to Baker, Ore., on business.

F. W. Eastman, of the Far West Clay Co., Tacoma, Washington, was a recent visitor to Portland.

R. E. Heine, local representative of Reid Brothers, left for a two weeks' visit to the home office at Frisco.

San Francisco Will Build Dock

In accordance with plans to make San Francisco a great United States naval base for Pacific Ocean fleets, the navy department is planning to install a great drydock, capable of berthing the largest vessels afloat, in San Francisco bay, according to advices received from Washington. The proposed drydock, which is to be in operation by 1915, will be 1000 feet in length and 115 feet in breadth.

An enlargement of the Mare Island navy yard also is said to be planned.

The Builders' Exchange Visits Astoria and Seaside and Have a Splendid Outing

The Portland Builders' Exchange was well represented at the Astoria Centennial by a large delegation who, after spending the day visiting the fair grounds, automobiling and seeing the many sights which the Centennial City affords, continued on down to Seaside, where they spent the night, arising early the next morning to go clam-digging, fishing or bathing, as their pleasure saw fit. The delegation made quite a showing on the streets of Astoria, with their badges labeled "Have You Joined the Portland Builders' Exchange?" The welcoming committee of the Centennial cordially invited the members of the Exchange to march in the parade which was being formed on their arrival, but on account of the modesty of the members and the short time they had to stay, the invitation was declined with thanks.

Among the firms belonging to the Builders' Exchange which had representatives on this occasion were: McCargar, Bates & Lively, the Timms-Cress Co., Burkhard & Weaverson, Teller & Ostbye, Lewis Frost, Portland Wire & Iron Works, East Portland Wire & Iron Works, Lucas & Son, Hartman & Thompson, W. P. Fuller & Co., Central Door & Lumber Co., Zanello & Son, A. W. Kutchke, E. E. Angell, Ruedy Bros., and others. The "bunch" had a splendid time and were highly pleased with their outing.

Elma Gets Largest Door Factory—Factory now Being Built at McCleary Will Have Capacity of 2500 a Day

Elma, Sept. 11.—Work is about finished on the building for the Henry McCleary Timber Company's big door factory located at the town of McCleary, eight miles from Elma. This factory will be the largest door factory in the world. The building itself will be 1136 feet in length and have a maximum width of 225 feet. When this space is filled with the necessary machinery, 2500 fir doors can be turned out each working day. Nothing but doors will be made. The fir door is now used all over the West, and while fir wood is harder to work than the softer woods, such as pine, it is so much prettier and more durable that the McCleary company expects to make markets all over the country.

The plant will be ready to run by the first of the year. Already the town of McCleary has a population of 600, and when the big plant is running steadily there will be about 1000 people in town and nearly 400 men employed at the mills alone. The Northern Pacific has a branch to the town and a gasoline motor car will probably be put on at once and give service between McCleary and the Harbor cities.

Students Slide to Safety in Chutes

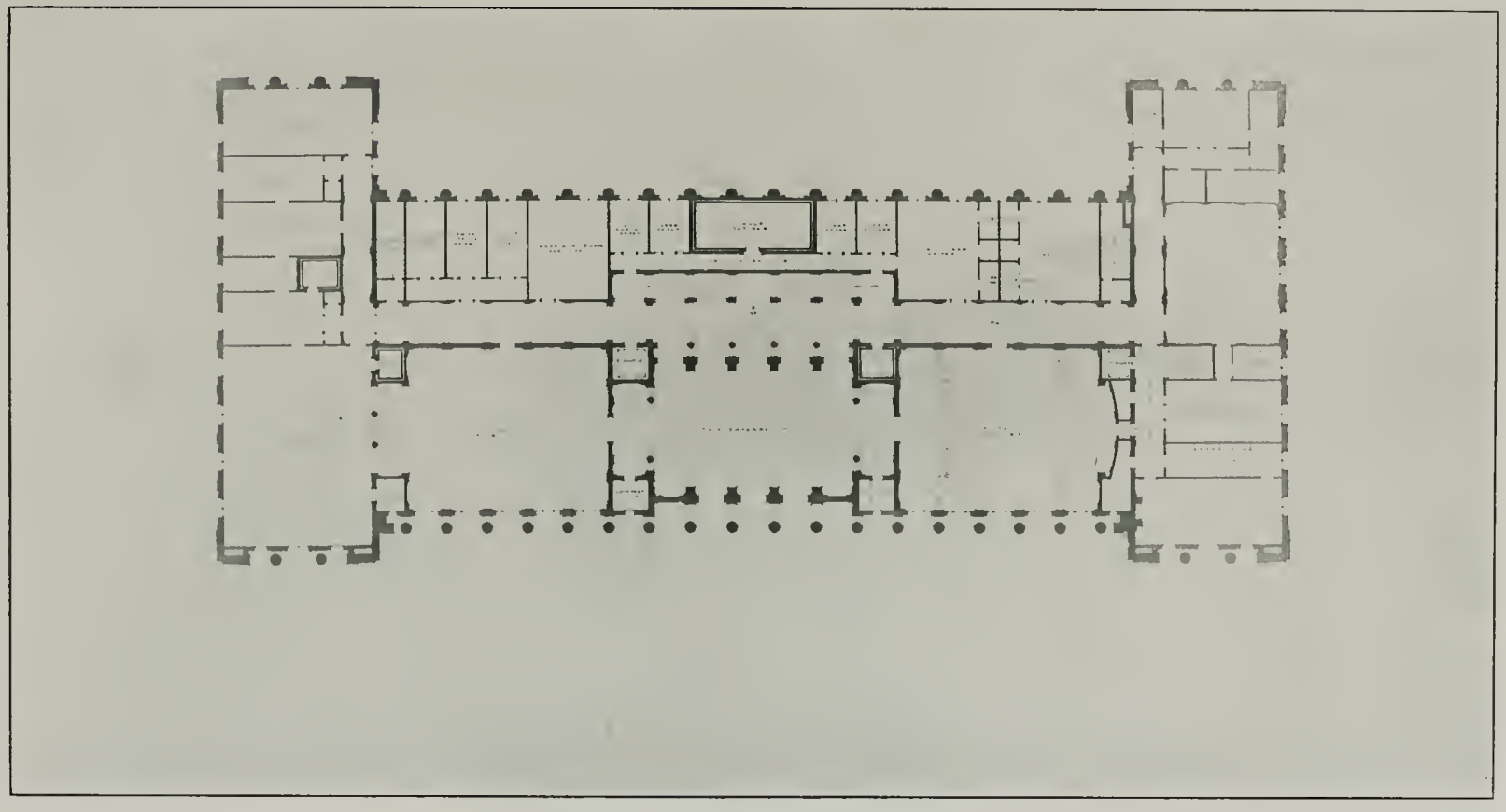
Mullan, Idaho.—Canvas fire chutes, an innovation in life-saving apparatus, have just been installed in the Mullan public school. They proved highly satisfactory.

The chutes consist of flat-bottomed canvas tubes. One end is permanently fastened inside a window. The other, when in use, is held taut by two men on the ground. The angle is about 45 degrees. When out of use the canvas is rolled up and placed in a box under the window. This box serves as a step in time of need.

In time of fire two older students will slide down the canvas, using it as a rope. Holding by provided handles, they may stretch it tight. Other students will follow, feet first, and will be landed nearly 20 feet away from the walls.

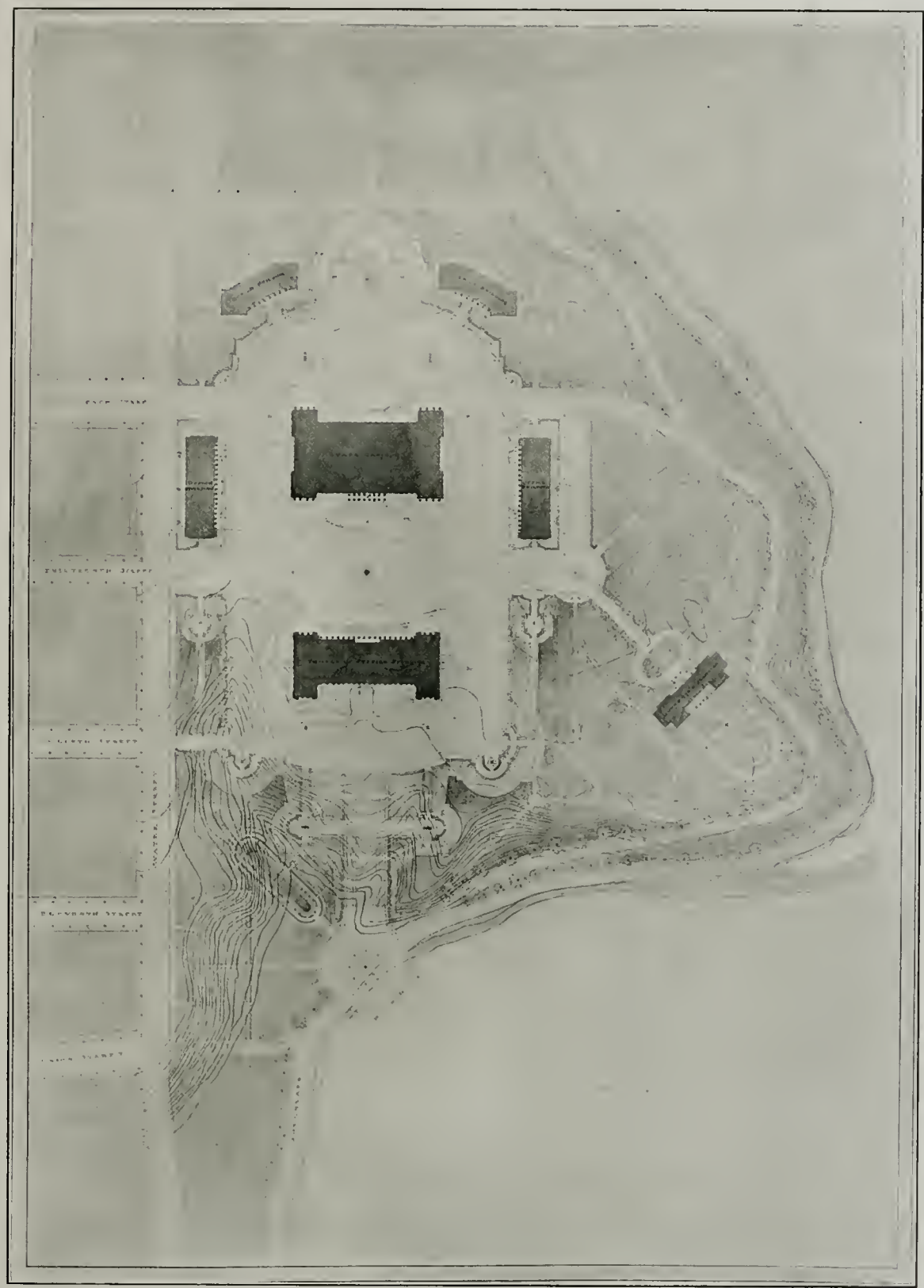
Accepted Design, Temple of Justice
Washington State Capitol Competition
Wilder & White, Architects, New York

Accepted Design, Elevation
Washington State Capitol Competition
Wilder & White, Architects, New York



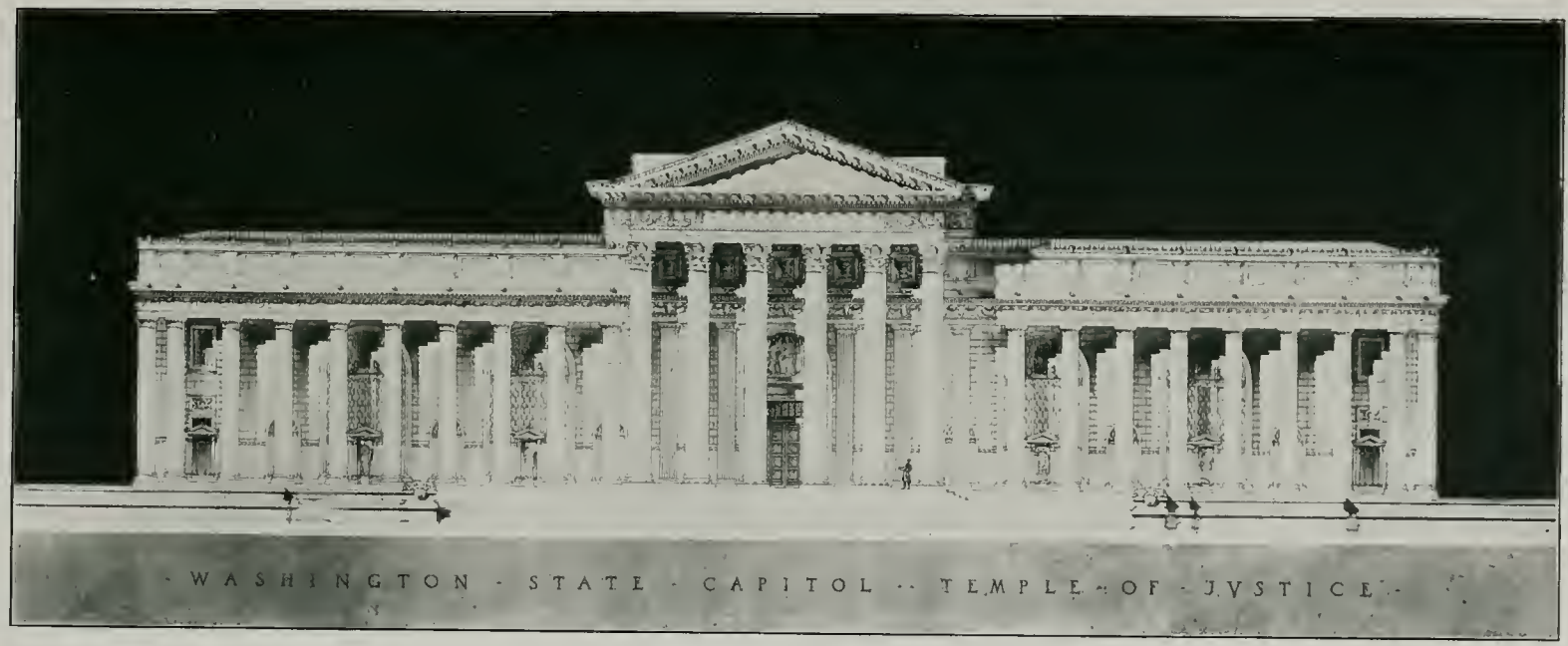
First Floor Plan, Accepted Design, Temple of Justice
Washington State Capitol Competition
Wilder & White, Architects, New York

PACIFIC COAST ARCHITECT
SEPTEMBER, 1911

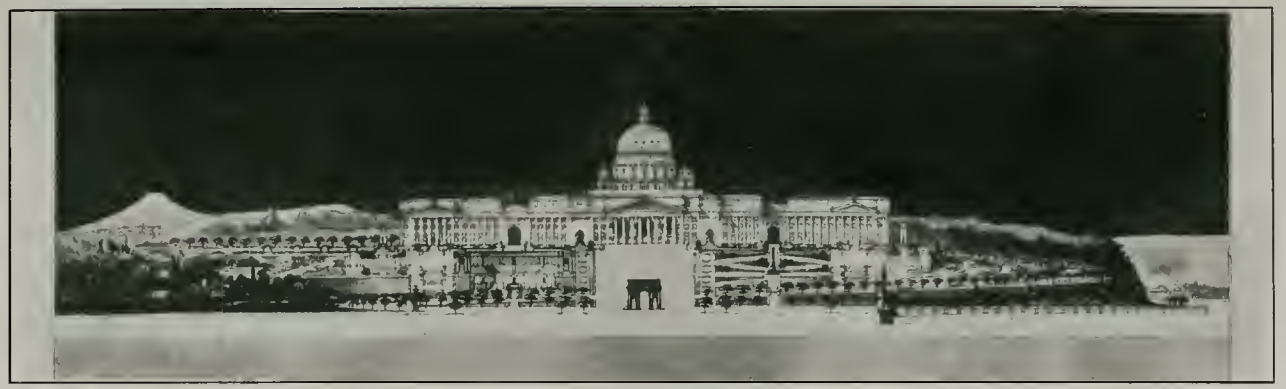


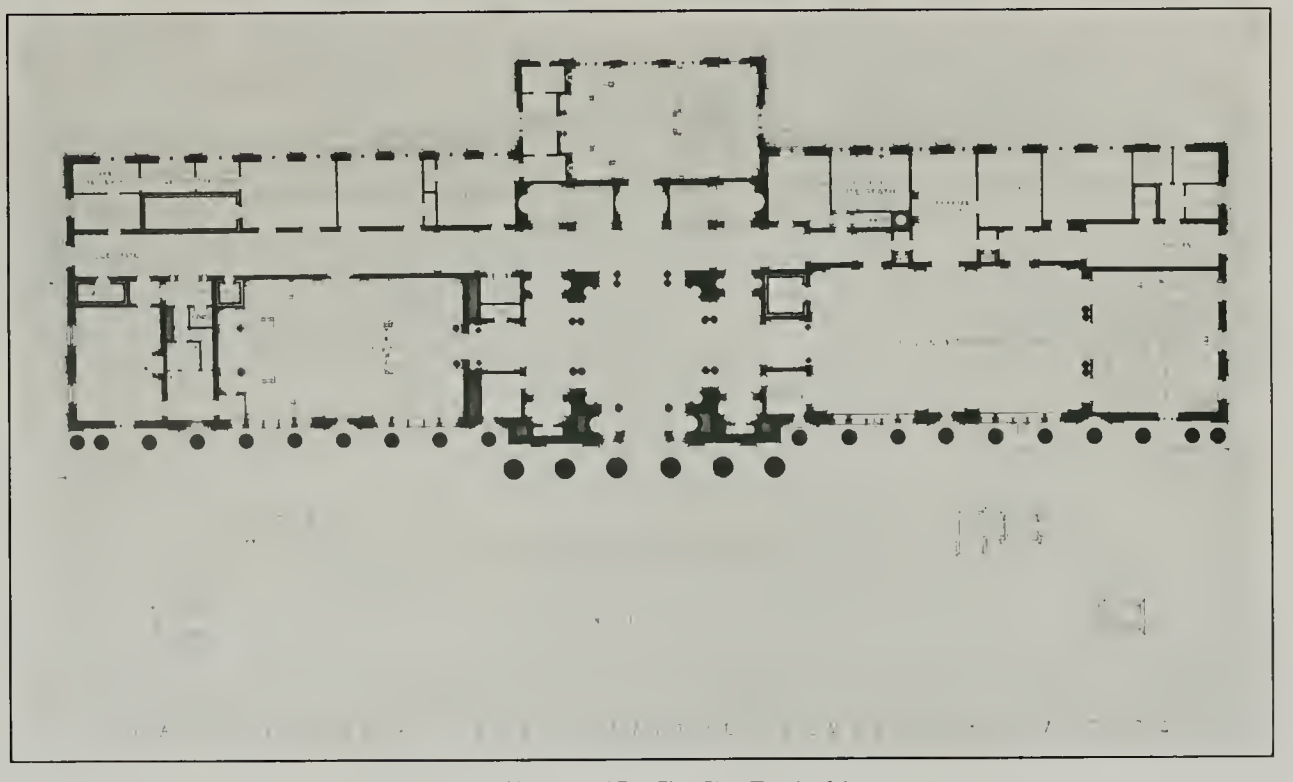
PACIFIC COAST ARCHITECT
SEPTEMBER, 1911

Accepted Design, Group Plan
Washington State Capitol Competition
Wilder & White, Architects, New York

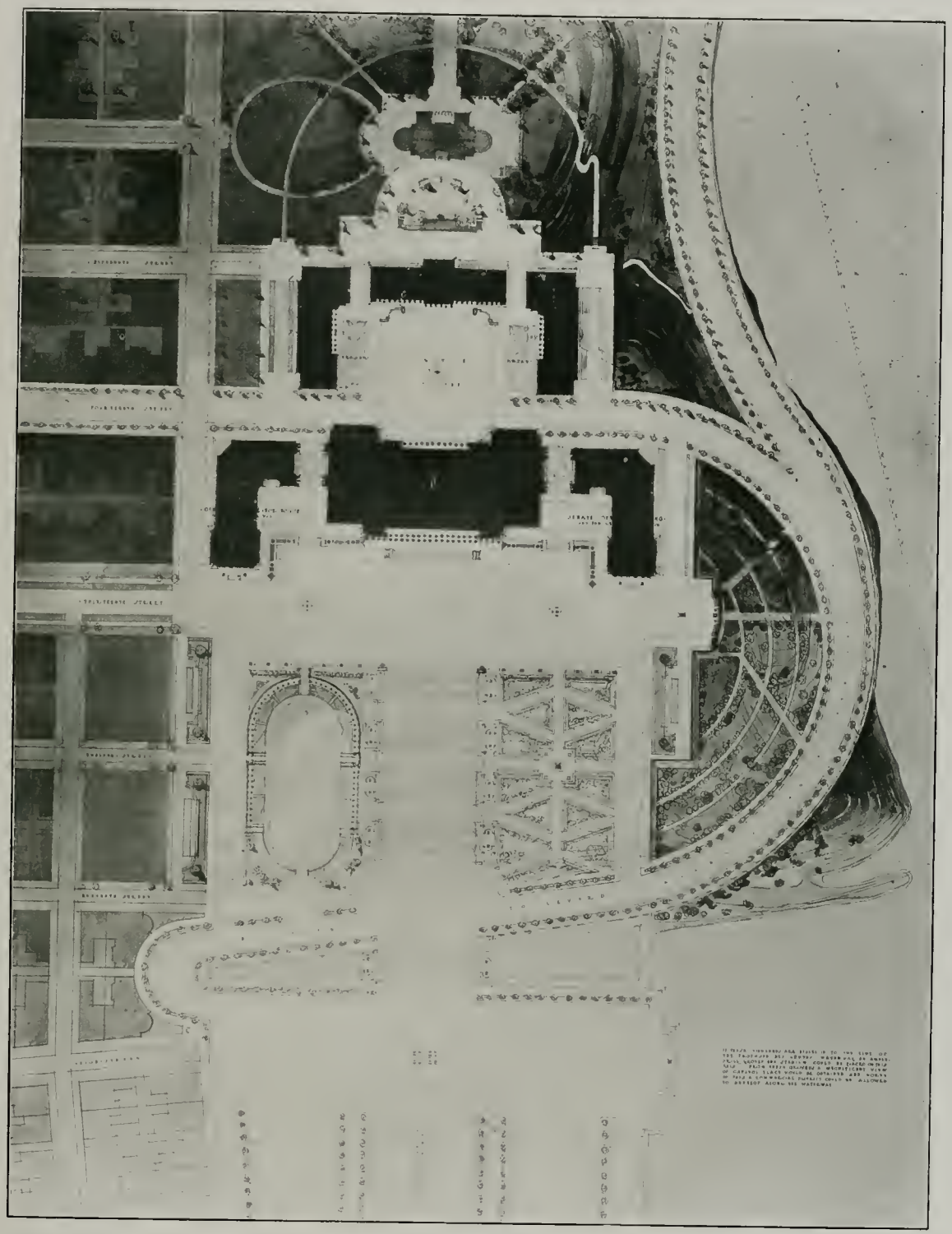


Second Prize, Temple of Justice
Washington State Capitol Competition
Howells & Stokes, Architects New York

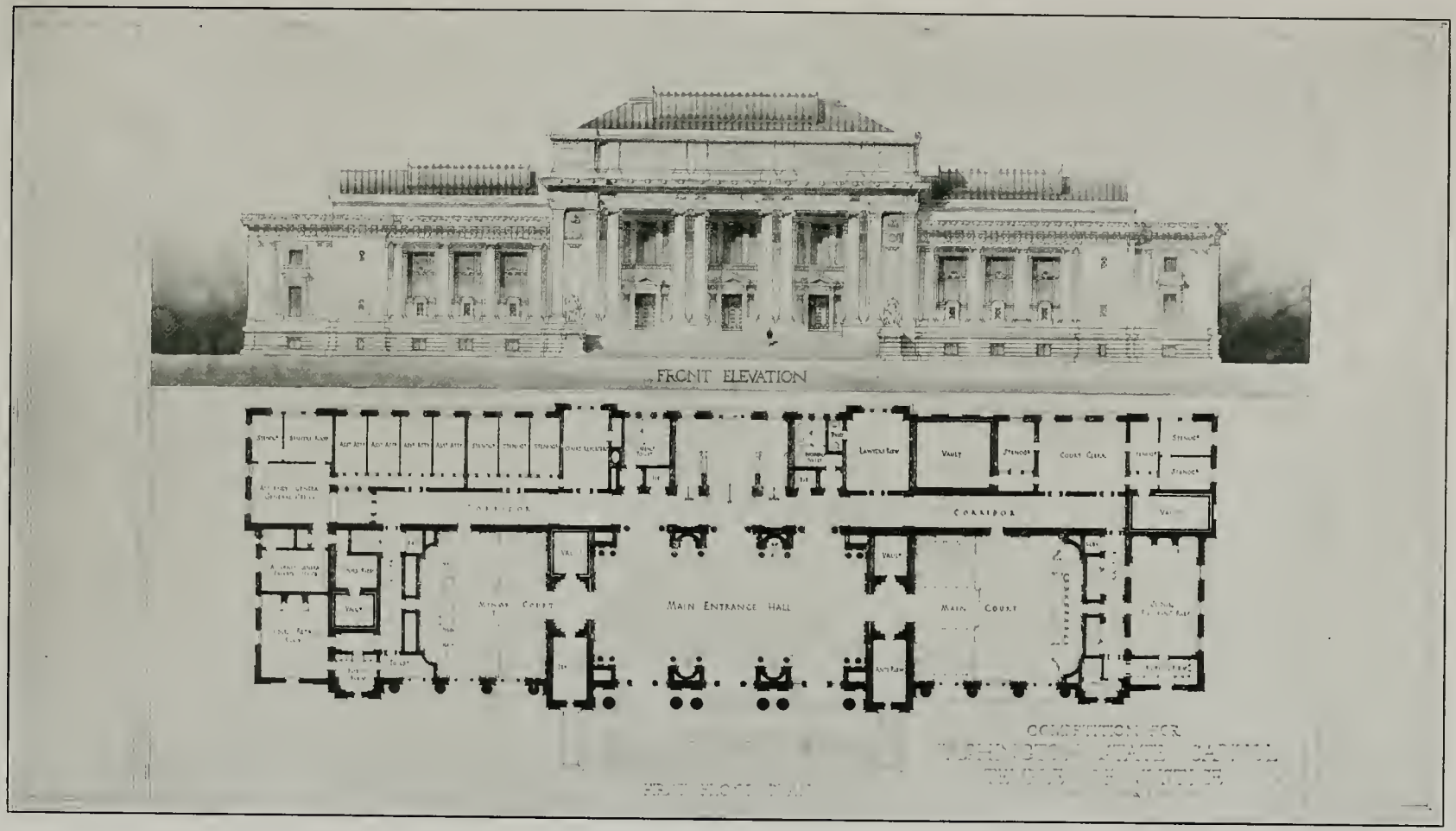




Second Prize, Elevation and First Floor Plan, Temple of Justice
Washington State Capitol Competition
Howells & Stokes, Architects, New York

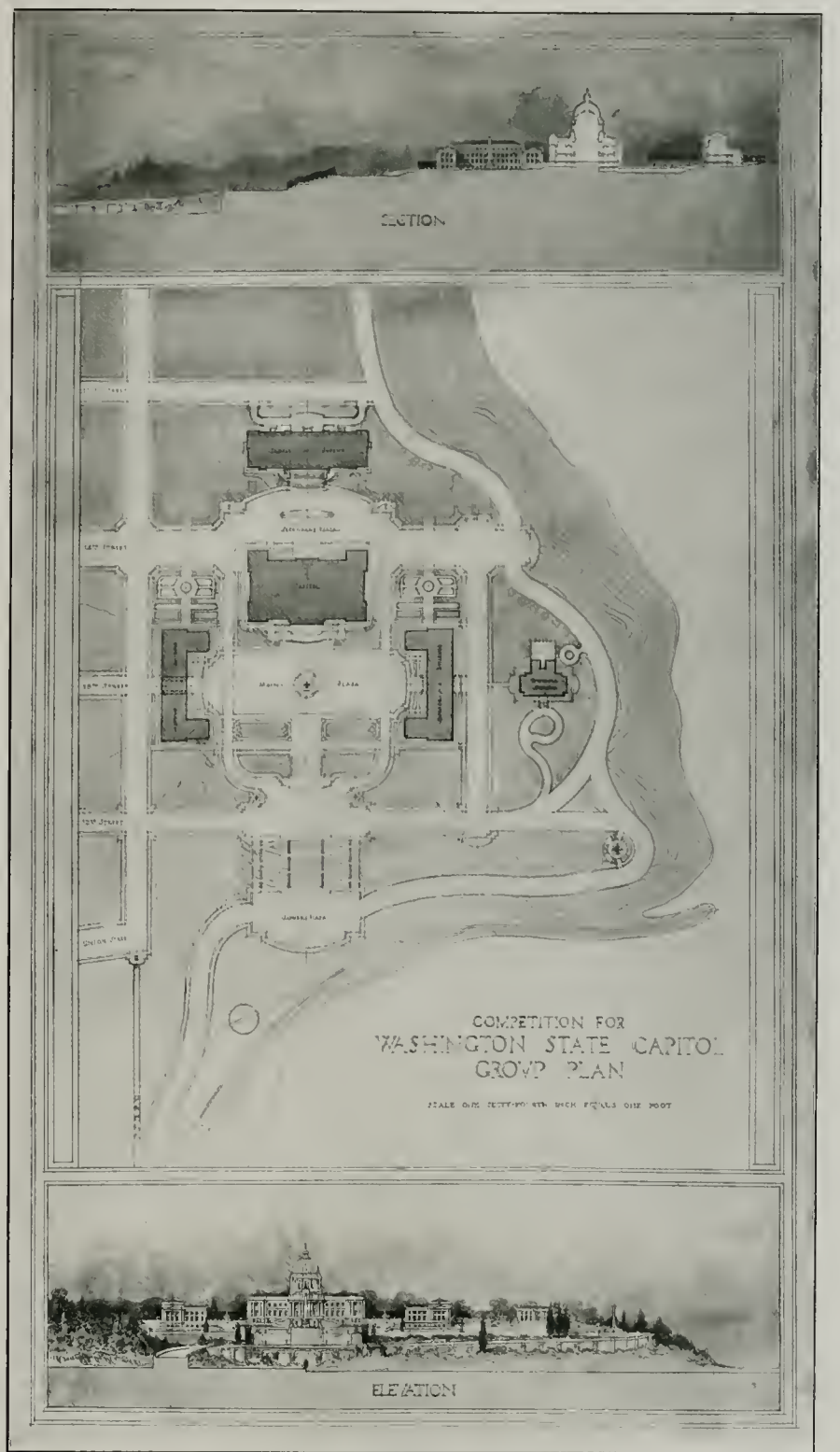


Second Prize, Group Plan
Washington State Capitol Competition
Howells & Stokes, Architects, New York

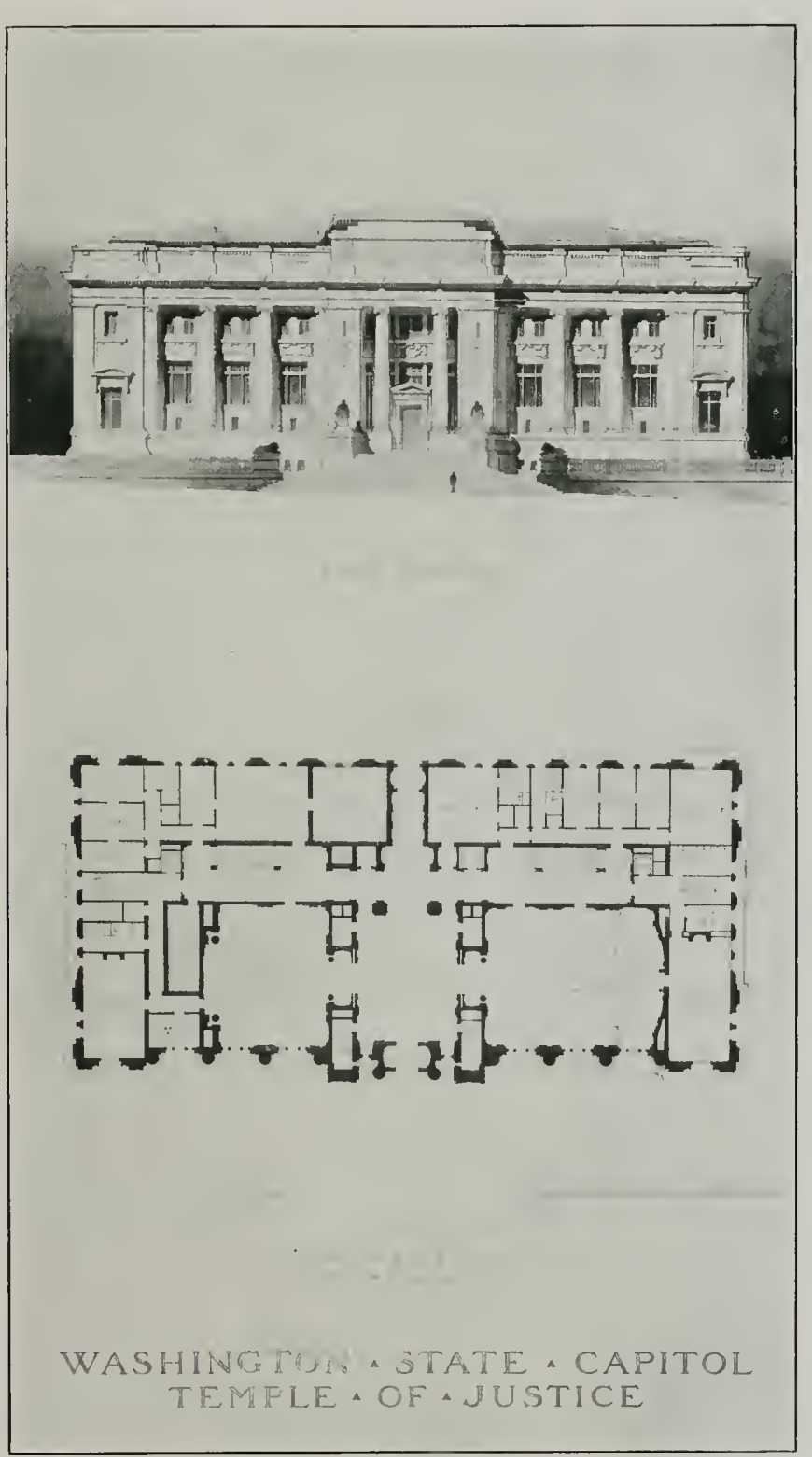


Third Prize, Temple of Justice and First Floor Plan
Washington State Capitol Competition
Mr. David J. Myers, Architect, Seattle Wash.

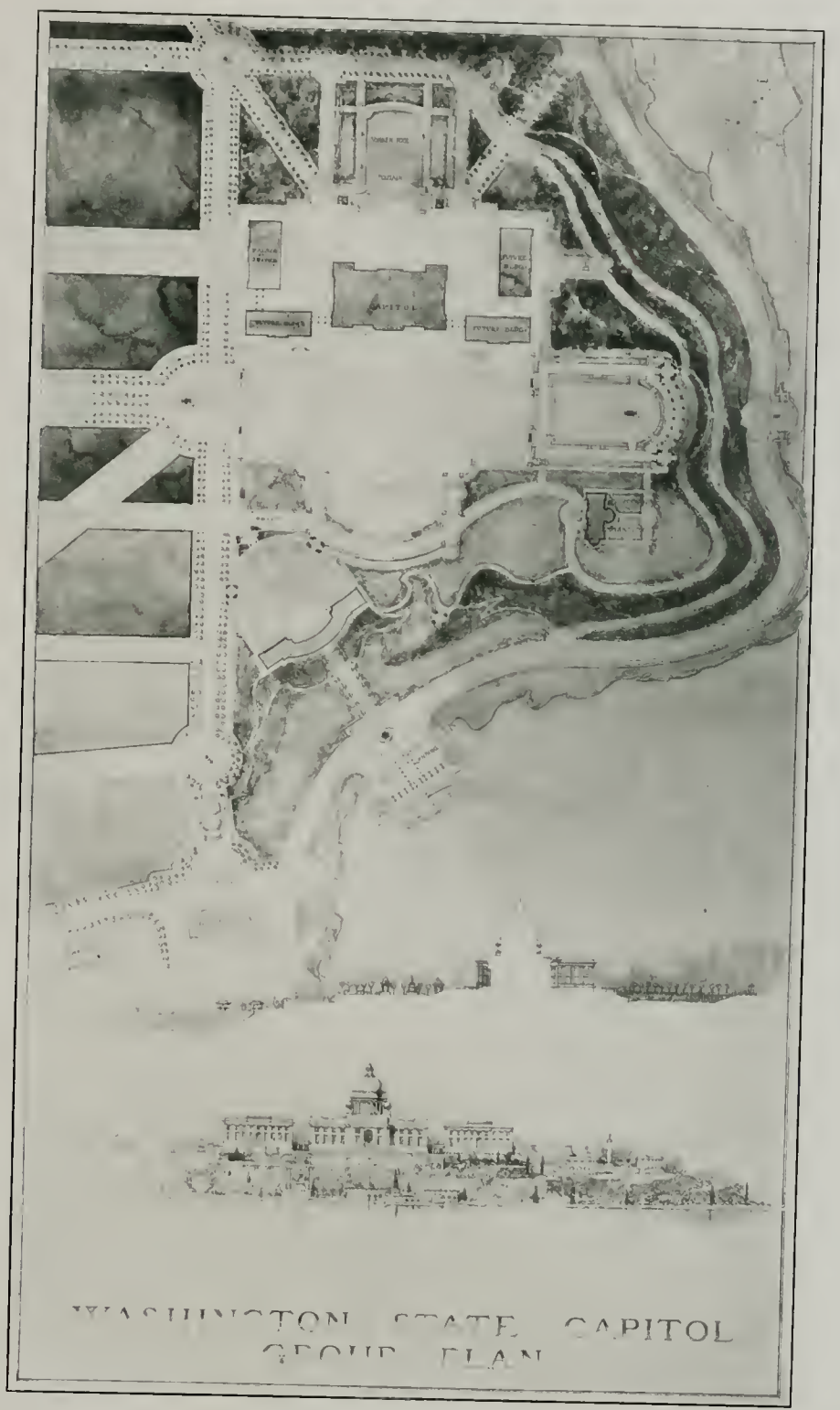
PACIFIC COAST ARCHITECT
SEPTEMBER, 1911



Third Prize, Elevation and Group Plan
Washington State Capitol Competition
Mr David J. Myers, Architect, Seattle, Wash.



Fourth Prize, Temple of Justice and First Floor Plan
Washington State Capitol Competition
Willcox & Sayward, Huntington & Gould, Mr. Charles H. Alden, Associated Architects, Seattle, Wash.



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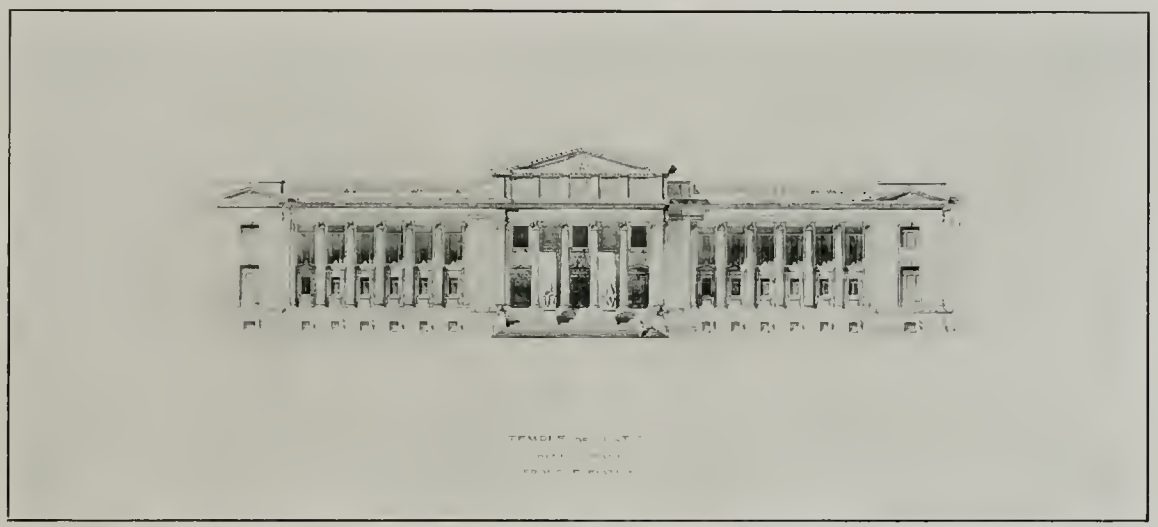
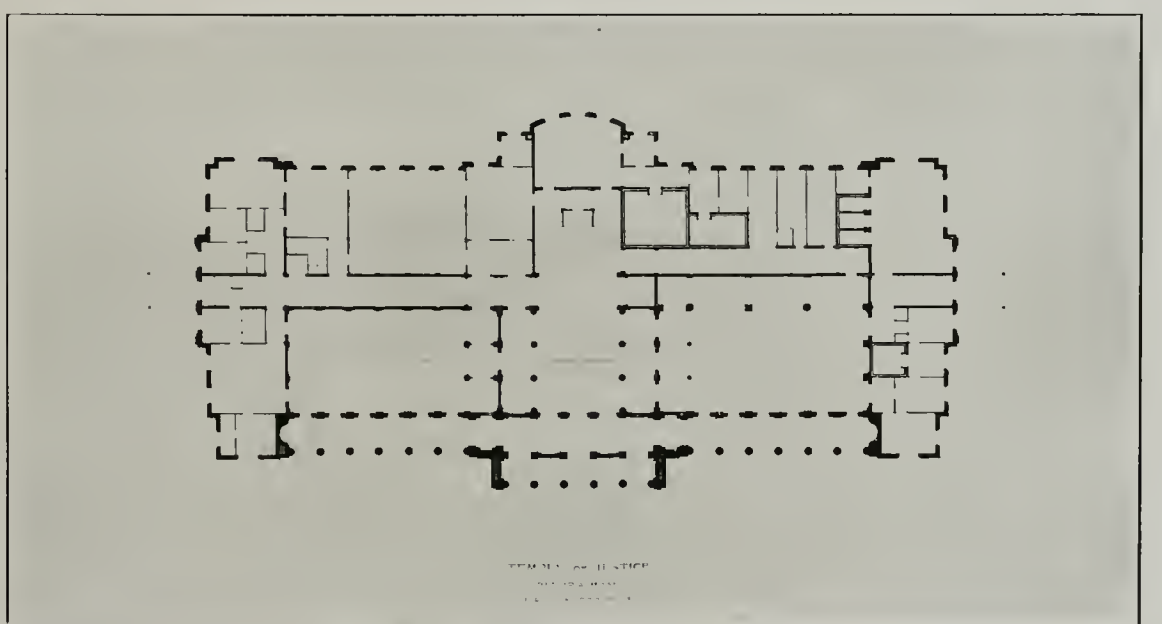
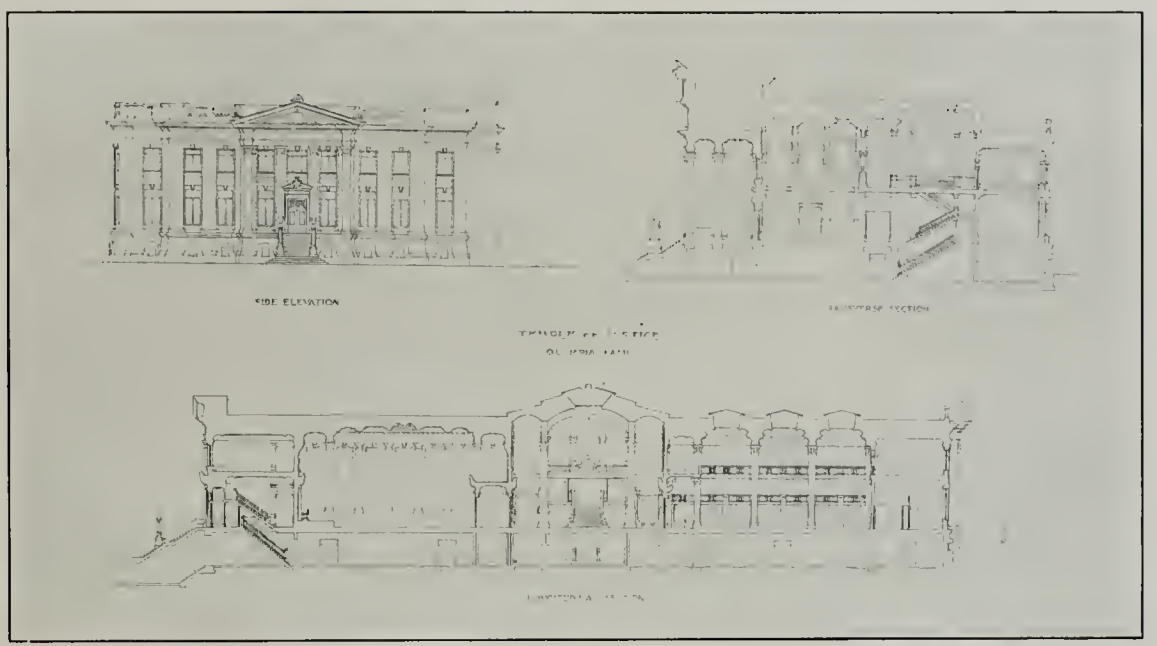
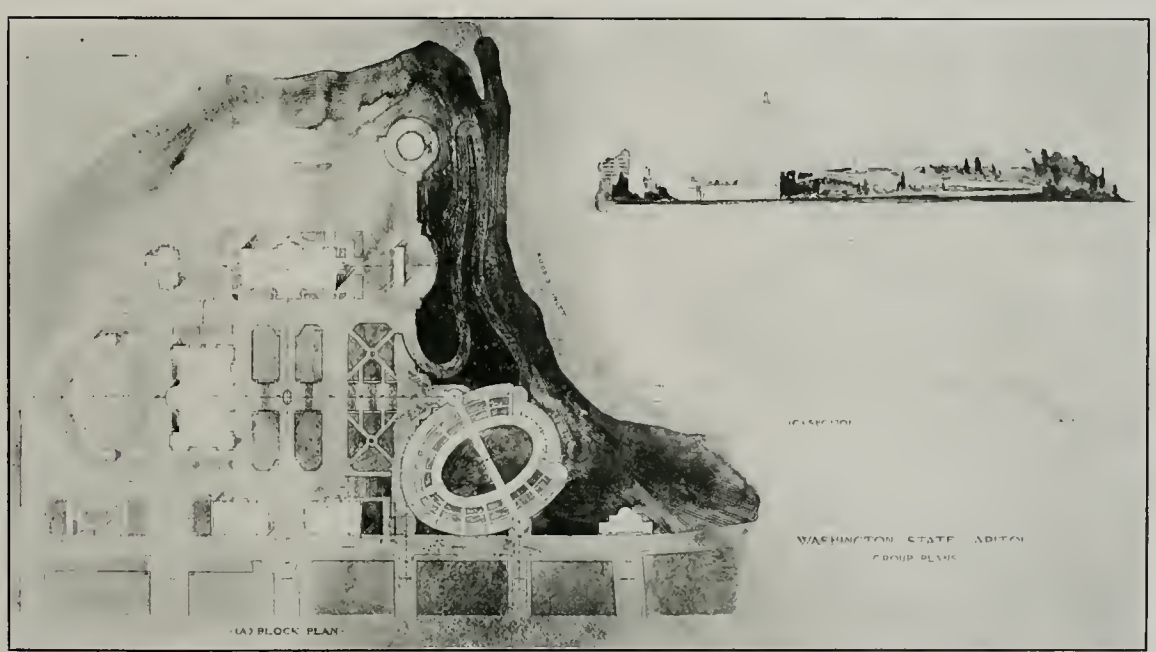
Washington State Capitol Competition
Willcox & Sayward, Huntington & Gould, Mr Charles H. Alden, Associated Architects, Seattle, Wash.





First Honorable Mention, Temple of Justice and First Floor Plan
Washington State Capitol Competition
Mr. G Albert Lansburgh, Architect, San Francisco, Calif





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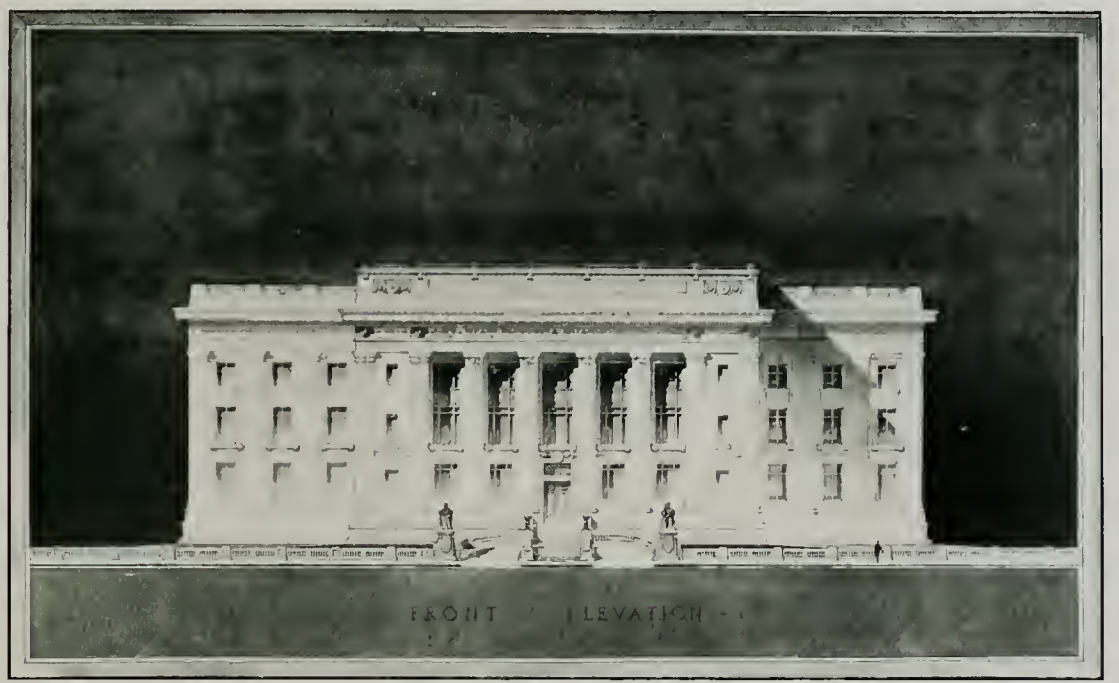

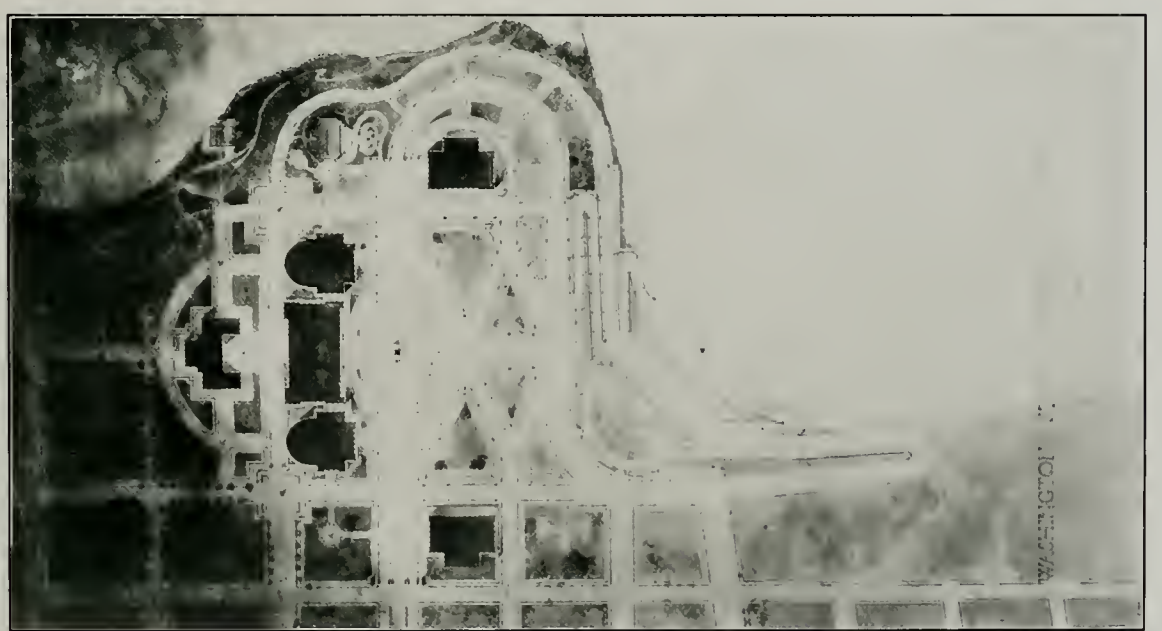

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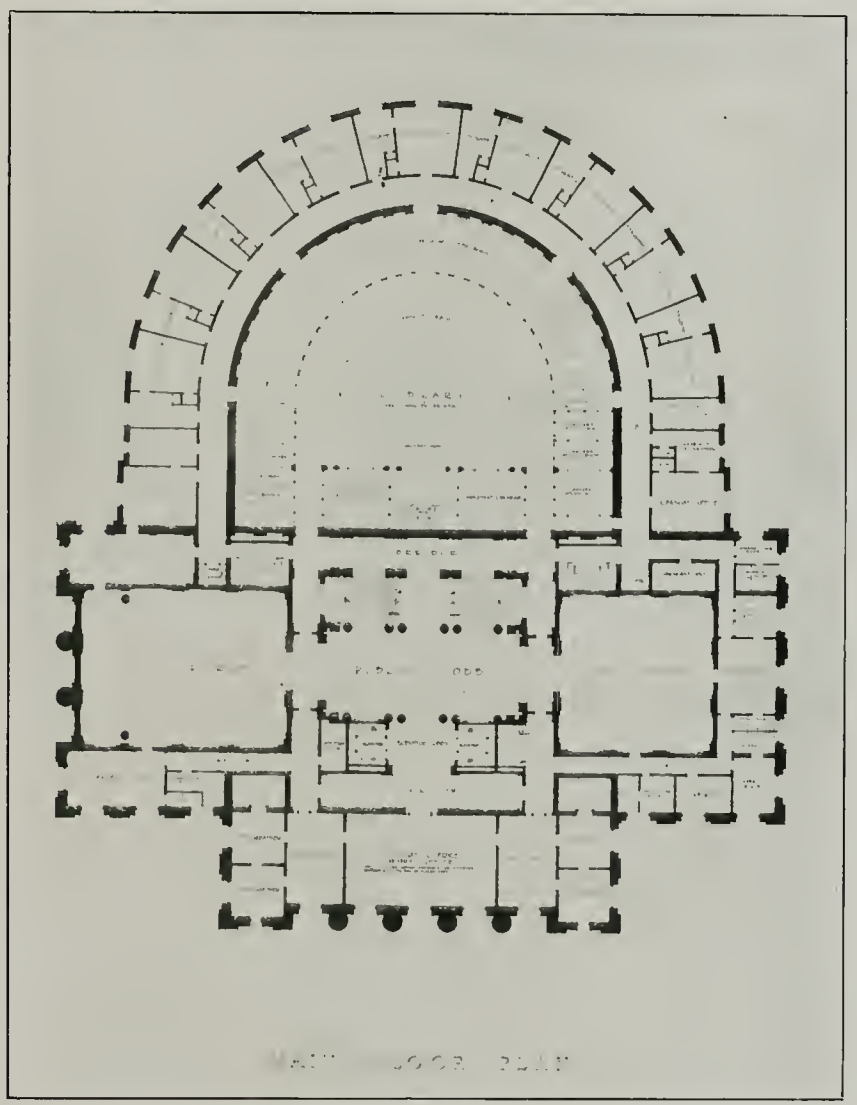
Washington State Capitol Competition
Mr. W Marbury Somervell, Architect, Seattle, Wash



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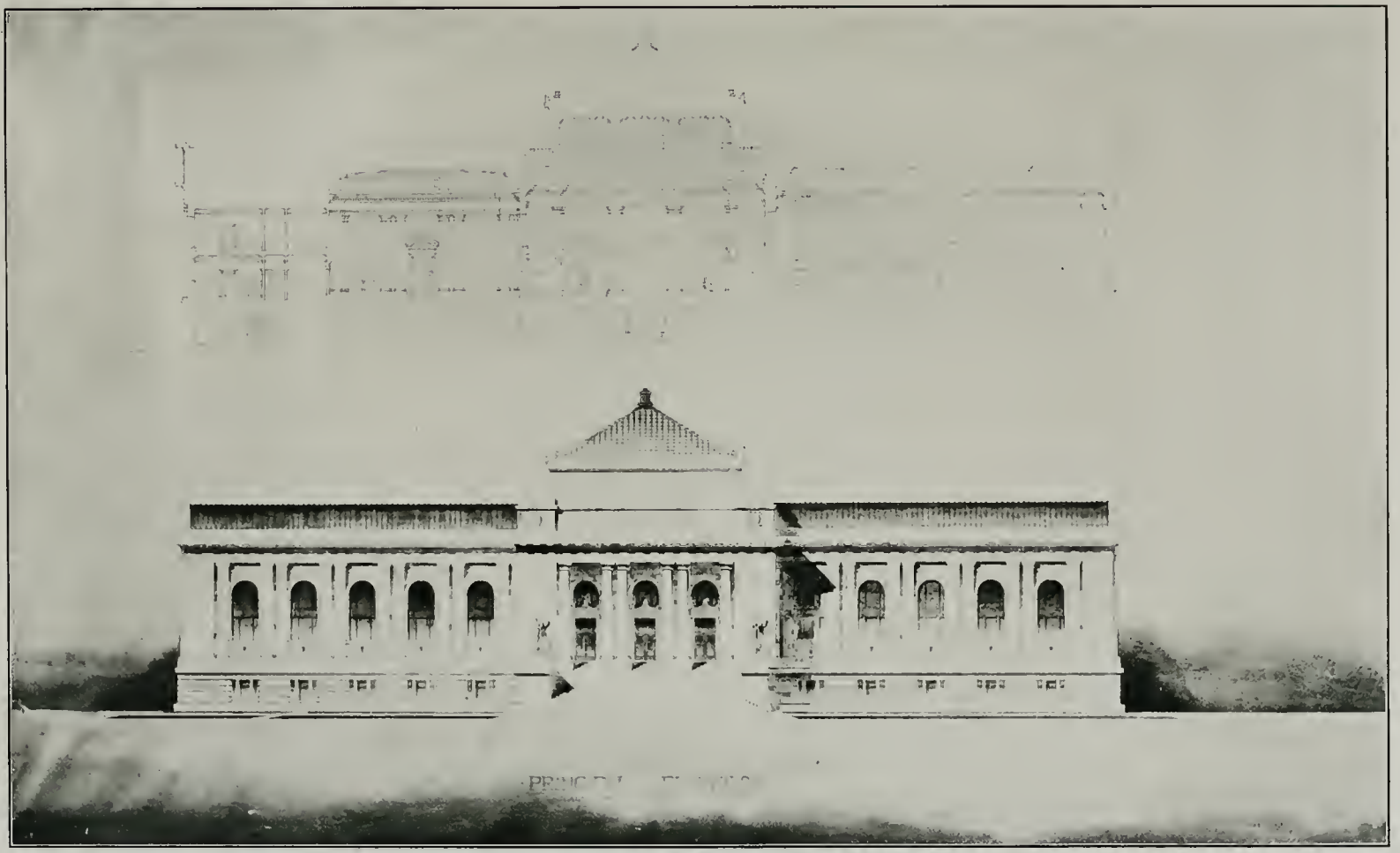
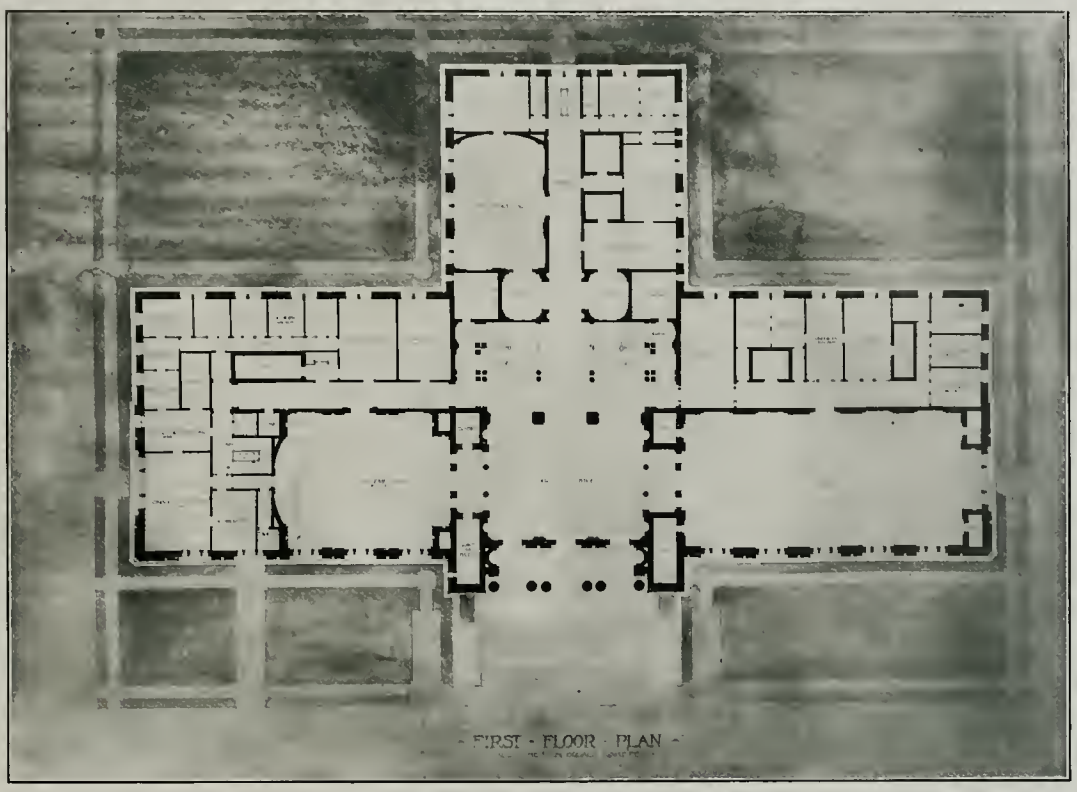
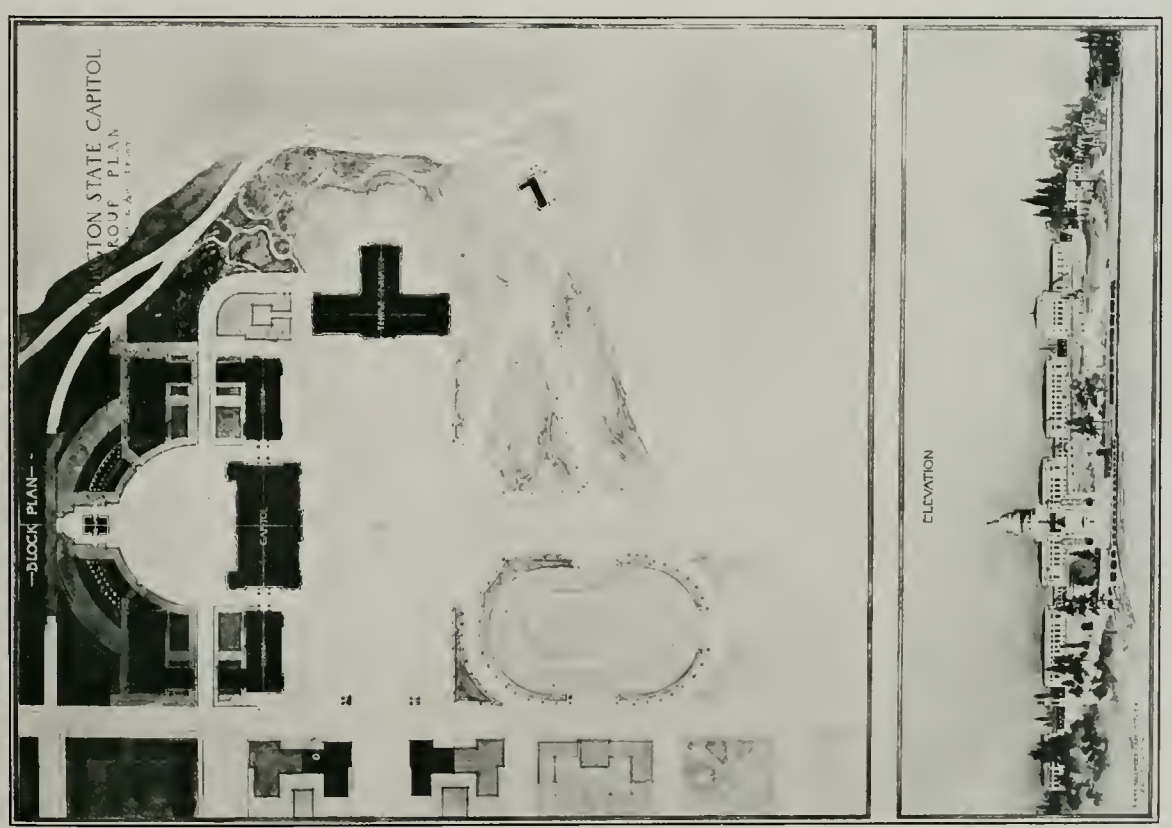


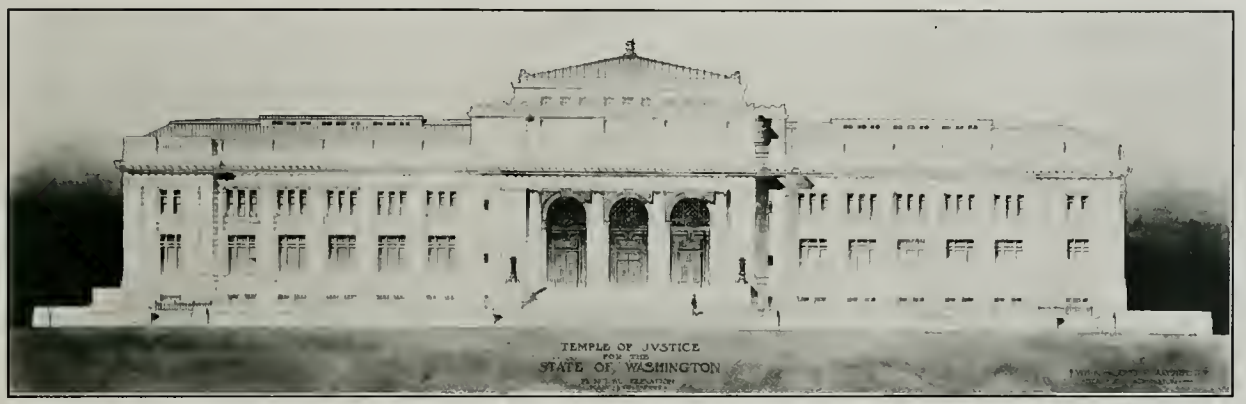
Second Honorable Mention, Temple of Justice and Section
Washington State Capitol Competition
Mr. Milton Lichtenstein, Architect, San Francisco, Calif

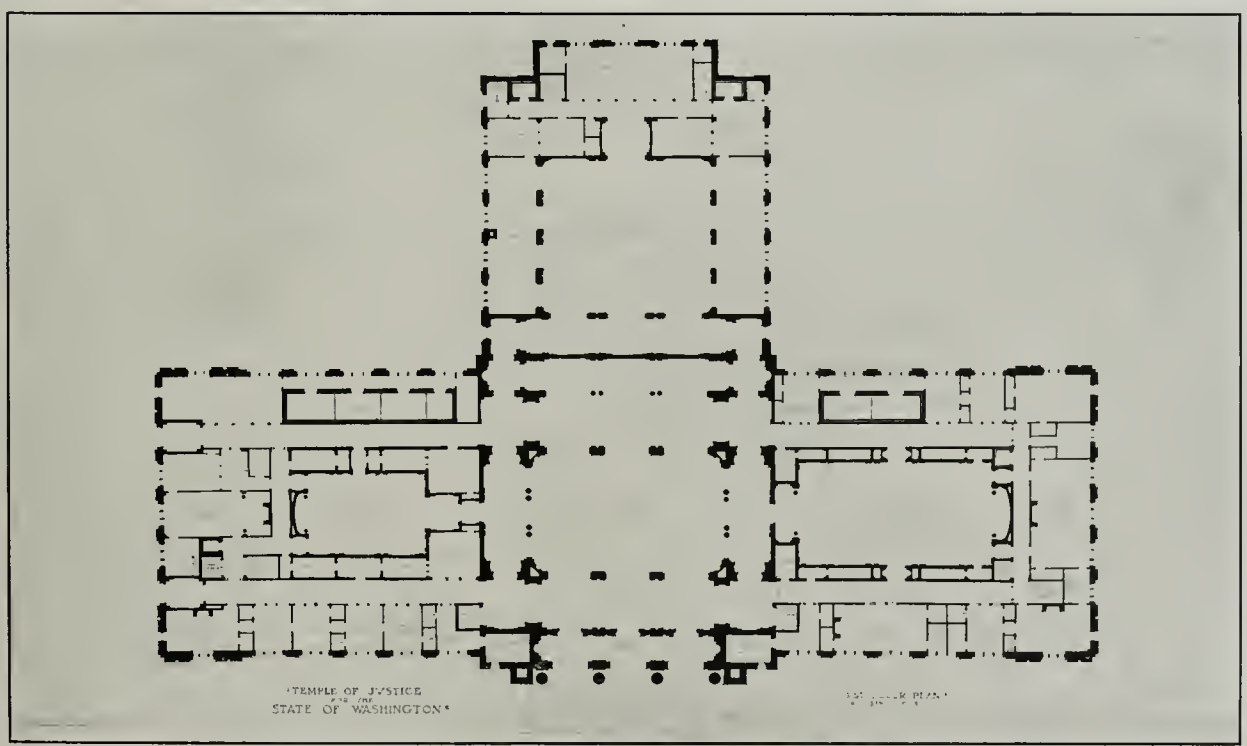


Second Honorable Mention, First Floor Plan, Temple of Justice
Washington State Capitol Competition
Mr. Milton Lichtenstein, Architect, San Francisco, Calif



Fourth Honorable Mention, Elevation and Group Plan
Washington State Capitol Competition
Mr William K. Macomber, Architect, Seattle, Wash.





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Mr. William K. Macomber, Architect, Seattle, Wash.

Modern Conveniences in Country Life

EDWARD S. TAYLOR

Electricity, gas and water under pressure seem to be the real necessities for modern comfortable living. All or part of these are usually to be had in cities, but the country dweller has had to do without until very recent years, either from their prohibitive cost or from lack of desire for them. The increasing wealth, however, of the planter, rancher and farmer, together with the better traveling facilities, giving them a broader knowledge of what the other third of the world is doing to be happy, has changed this condition so that now there is a demand everywhere for small, safe and economical installations for electrical lighting and producing water under pressure.

The city man who has built his country house and occupies it all or part of the time must have these conveniences as a matter of course. This desire for better things has been met by a development in machinery and methods that is remarkable. Electric lights, pressure water and even small refrigerating units are available to practically everyone at comparatively small cost.

It would seem, in reading the country life journals, that every boiler and pump maker in the country had gone into the so-called pressure system business, one as an outlet for his tanks and the other for his pumps. These so-called systems, with one or two exceptions, show very little originality and are much the same all the way through. They, as a rule, consist of a pressure storage tank, a pump for hand or power operation and a lot of fittings. The only variation is in the quality of the material furnished and the length of the credit term extended by the seller. As a rule the selling is done by mail. Elaborate literature and advertisements are sent out showing the lawn and garden being copiously watered, the automobile being washed, the bath tub being filled, the laundry tubs in use and in many cases a lot of domestic stock are seen to be quenching their thirst. This is all very alluring. An information blank is usually sent out with this literature, asking a lot of questions, and when the answers are received, and these, as a rule, are not very intelligent, quotations and recommendations are made, and in many cases the sale is consummated. A dozen pertinent items peculiar to the local conditions are overlooked by the purchaser, and even if he had taken them into consideration they would not have had any bearing on the recommendations made by the manufacturer.

The purchaser or the nearest general utility man installs the system when the material is received. They may get it right, but more often it is all wrong, and the blame is put on the system, when in fact it is perfectly good in every way as far as it has gone. In a very large percentage of cases the purchaser has a system installed that is far from satisfactory or has by no means received his money's worth merely because there was a great lack of care in the original recommendations and design.

The greatest mistake seems to be in supplying an utterly inadequate storage capacity particularly to meet emergencies. This comes from a lack of intelligent analysis and explanation on the part of the seller who wants the order at any cost, and the desire to save money on the part of the buyer. The fact that this system is to be a very important part of his domestic economy does not at the moment appeal to him. So in order to save a little money he puts in something that is not fitted to do the work he desires it to do and he is disappointed.

As a general proposition it can be stated that where a single tank is used, only a third of the total capacity of the tank is available for water under useful pressure. One-third must be used for air and the balance contains water, as a rule under a pressure too low to be of service. A thousand-gallon tank will therefore give a man less than four hundred gallons of water that can be used at all points in his system, and in this kind of design it is the highest point that must be considered. This amount would ordinarily be enough for domestic purposes and general house and garden use, but in case of fire would be utterly useless. It would seem that this very important item is given scant consideration by those who are selling the material. A country home should never have less than a supply that will take care of a three-quarter-inch stream from ten to fifteen minutes under a constant pressure of not less than forty pounds. Anything less than this will not meet the emergency when it comes and is therefore inadequate.

The habit of burying pressure tanks is to be condemned. No one would think of doing this to a steam boiler, yet the conditions are much the same only in a minor degree. Pressure tanks should always be placed where they are accessible all around, so that any leak can be quickly found and remedied.

The worst feature of the ordinary single tank system is that the pressure must be far too high to be comfortable at its highest point if it is to be high enough to be of any service when the water has been lowered to the low limit. Also in order that these pressures may be obtained it is usually necessary to start with an initial pressure in the tank of perhaps ten pounds, adding a complication that is not to be desired. This is usually obtained by arranging the pump to deliver air and water together. This arrangement also allows for the replacing the air in the tank that is carried out with the water. The device works very well when carefully and intelligently watched, which it seldom is. Some systems are fitted with automatic arrangements to take care of this, but as a rule these require even more careful watching than the others.

The best results in maintaining this air supply are undoubtedly obtained by the use of an auxiliary compressor of a definite fixed output to that of the pump and fitted to unload when the tank pressure has reached its predetermined maximum.

In certain cases very good results are obtained by the use of a system whereby the water is lifted from the well and distributed by the use of air pressure alone. No water storage tanks are provided and its capacity at any given moment is limited by the flow of water into the well or cistern. This system should never be used except in cases where the power conditions make it almost impossible to use direct lifts and pressure. Air compression at its best is very uneconomical. Also except where very deep wells are concerned the number of small parts involved in this class of apparatus makes it liable to get out of order easily. It is particularly useless as a means of fire protection.

The best system to be had is none too good for a home, as it may be the very foundation of comfortable living and safety. Each case is, as a rule, entirely individual and should be so treated. The purchaser should always seek the advice of some one who has had experience in this kind of work and who would treat it from a technical rather than a commercial standpoint. If this important adjunct of the home is worth considering at all it is worth as much

(Continued on Page 259)

A Resume

Recent items selected from the Daily Advance Reports of The Pacific Coast Architect.

PORTLAND.

Garage. E. E. Coovert erecting a two-story mill garage, 48 Twentieth street, to cost $10,000.

Residence. Mrs. L. Arnold, 575 Marshall street, erecting frame residence to cost $9500.

Residence. J. B. Dickover, 1183 Union avenue N., erecting frame residence to cost $5500.

Residence. M. E. Blanchard erecting frame residence to cost $6000.

Apartment. E. N. Carstens erecting frame apartment to cost $8000.

Residence. E. M. McKenzie, 520 East Twenty-fourth street, erecting frame residence to cost $8000.

Apartment Building. E. S. Ellis, 603 Board of Trade, erecting three-story brick to cost $35,000.

Store and Flat Building. L. Gerlinger is erecting store and flat building to cost $10,000.

Flat Building. W. E. Bowman & Co., East Twenty second and Brazee, erecting two-story frame flat building to cost $16,000.

School Building. School District No. 1 erecting two-story frame school house to cost $20 000.

School Building. School District No. 1 erecting two-story frame school house to cost $25,000.

Store and Residence. Architect Richard Martin, Jr., prepared plans for two-story frame store and residence building to cost $15,000.

Residence. L. C. Berger, 304 Wheeler street, erecting two story frame residence to cost $5000.

Business Building. Portland Railway, Light & Power Co. erecting one-story brick paint shop to cost $50,000.

Apartment House. Architects Claussen & Claussen prepared plans for apartment building for J. S. Johnson to cost $20,000.

Business Block. Sellwood. Architects Claussen & Claussen prepared plans for two-story brick business building to cost $7500.

Apartment Building. Bailey, Taylor & Lambert erecting four-story brick apartment at a cost of $45,000.

Residence. Joseph Clundinsky erecting two-story frame residence to cost $5000.

Residence. Austin N. Wheeler, Spalding building, erecting frame residence to cost $5200.

Apartments. Architects Kroner & Henn prepared plans for frame apartment building to cost $10,000.

Residence. Architects Spencer-McCain Co. prepared plans for two-story frame residence to cost $5000.

Business Building. H. M. Fancher Co. prepared plans for two-story reinforced concrete business building to be built at St. Johns.

Residence. S. C. Jagger, 574 East Couch street, will erect frame residence to cost $5,000.

Store and Residence. Mrs. Ann Gerlinger will erect two-story brick store and residence to cost $9500.

Residence. S. C. Crosinhite erecting two-story frame residence to cost $5000.

Store Building. Sellwood. Architects Baker & Bingham prepared plans for two-story concrete brick veneer business building to cost $10,000.

Residence. Architect D. B. Flickinger prepared plans for two-story brick residence to cost $8000.

Flat Building. Architect E. E. McClaran prepared plans for two-story frame flat building to cost $6000. The same architect prepared plans for two-story frame residence to be built at Des Moines, Idaho, to cost $7000.

Flat Building. Architects R. N. Hockenberry & Co. prepared plans for two-story frame flat building to cost $5000.

Residence. Architect Lewis I. Thompson prepared plans for Colonial residence for R. G. Hopson to cost $10 000. The same architect prepared plans for hotel building to be erected at West Stayton, Oregon.

Theatre Building. Architects Claussen & Claussen prepared plans for one-story theatre building to cost $7500.

Repair Shop. Portland Railway, Light & Power Co. will erect one-story brick car shop to cost $30,000.

Church. The Swedish Mission Church will erect a three-story mill construction church building to cost $12,000.

Store and Residence Building. Mrs. Mary L. D. Peniston, 4531 Seventieth street, erecting three-story frame residence to cost $15,000.

Fire Station. Architects Emil Schacht & Son prepared plans for the erection of a two story brick fire station at Woodstock.

Flat Building. E. L. Pease, 784 Pettygrove street, erecting two story frame flat to cost $6200.

Residence. T. A. Baker, 1160 Detroit avenue, erecting two-story frame residence to cost $5000.

Office and Store Building. Architects Whidden & Lewis preparing plans for 12 story, class A., 100x100 office and store building, to cost $250,000.

Hotel and Store Building. Architects Bennes & Hendricks preparing plans for three-story brick, 100x150, store and hotel building, to cost $80,000.

Apartment Building. Morgan, Fleidner & Boyce will erect a six-story apartment building on the recent site of the Hanover Apartments destroyed by fire.

Gymnasium. Architect Ellis F. Lawrence prepared plans for 2 50x140, three-story gymnasium building, to be built in connection with the Washington High School.

Bank Building. Architects McNaughton & Raymond prepared plans for a 50x100, three-story bank building.

Club House. Architect W. B. Bell prepared plans for the remodeling of the Overland warehouse to be used as a Chinese club house.

Residence. The O. W. M. prepared plans for two-story frame residence for Richard W. Alsberger.

Residence. Architects Jacobberger & Smith prepared plans for residence for Dr. A. J. Giesy to cost $25,000.

Church Building. The African M. E. Church will erect a new building on the corner of East Sixth and Multnomah streets.

Residence. Architect J. B. Clark preparing plans for residence for Mrs. Lilly Gill to cost $5000.

Warehouse. Architect Edward T. Root prepared plans for six-story warehouse for the Oregon Transfer Co.

Hotel Building. Architect D. L. Williams prepared plans for an eight-story, 50x100, reinforced concrete hotel building, for the Smith Hotel Co.

Residence. Architect Charles W. Ertz preparing plans for five residences for Mrs. Hamilton.

Apartment Building. I. A. Peters erecting three story brick apartment house to cost $32,000.

Masonic Temple. Salem. Architect Ellis F. Lawrence preparing plans for six-story brick business and Masonic building to be built at Salem at a cost of $100,000.

School House. Toutle, Wash. Architect Arthur J. Maclure preparing plans for two-story reinforced concrete school house to be built at Toutle, Wash.

Office Building. Pacific Telephone and Telegraph Co. will erect large office building as soon as a site has been secured.

Residence. Architect J. O. Wrenn prepared plans for two-story frame residence for Brockwell Statter.

Residence. Architect J. F. Kable prepared plans for seven-room frame residence to be built for Wm. J. Clarke.

Hotel Building. Architect H. Hanselmann prepared plans for six-story reinforced hotel building for Mrs. E. F. Goode.

Residence. Architect D. B. Flickinger preparing plans for two-story frame residence for E. Hasenmayer at a cost of $5000.

Power House. Medford. Architect Robert F. Tegan prepared plans for power house and laundry for the Sacred Heart Hospital at Medford to cost $10,000.

Store Building. Wm. Reidt erecting one-story mill construction store building to cost $10,000. The same owner erecting two other one-story stores to cost $8000 and $9000 respectively.

Business Building. E. Berg erecting two-story concrete business building to cost $15,000.

Warehouse. Architects Whitehouse & Foulihoux prepared plans for four-story mill construction warehouse to cost $25,000.

Mill. The Dalles. Architects Bennes & Hendricks prepared plans for the erection of a reinforced concrete flour mill to be built at The Dalles at a cost of $100,000.

OREGON.

Bank Building. Springfield. The Springfield Bank building bankjng quarters to cost $12,000.

School Building. The Dalles. Tax Payers District No. 9 at Rowena voted to erect new school building.

Dam. Astoria. Water Commissioners will have erected a dam to hold a million gallons of water at a cost of $75,000.

Store Building. Umatilla. Architect C. H. Hinebaugh prepared plans for two-story brick block to cost $12,000.

Warehouse. Eugene. Architect John Hunzicker prepared plans for two-story frame, 40x60, warehouse.

Church Building. Wallowa. Catholic Church will erect new building.

Armory. Dallas. Architect W. H. Morrison prepared plans for the erection of an armory.

SEATTLE

Office Building. Architects Howells & Stokes prepared plans for 3 story 120x190 steel frame with reinforced concrete office building to cost $100,000.

Hotel. Architects Bebb & Mendel will prepare plans for the erection of a hotel in the Rainier National Park for the Chicago, Milwaukee and St. Paul Ry. at a cost of $500,000.

Garage. Architects Howells & Stokes preparing plans for a garage for C. F. White at a cost of $6,000.

Office Building. Architect W. Marbury Somervell prepared plans for erection of a 12 story office building.

Store Building. The Bryant Lumber Co. will erect 3 story brick store building to cost $20,000.

Office and Store Building. W. H. Murphy, 708 Ewing St., will erect 3 story reinforced concrete store and office building to cost $50,000.

School House. Architects Beezer Bros. prepared plans for 3 story brick and stone school building to cost $35,000.

SPOKANE

Business Building. Washington Liquor Co. erecting brick building to cost $5,000.

Hospital Addition. St. Luke Hospital will build an addition at a cost of $50,000.

Store and Apartment Building. Smith & Co., 117 Post St., will erect 3 story brick store and apartment building at a cost of $60,000.

Business Building. Pacific Telephone & Telegraph Co., of San Francisco, will erect an 8 story brick office building at a cost of $30,000.

Residence. I. N. Peyton will erect modern residence at a cost of $50,000.

Residence. Architect Julius Zittell preparing plans for modern residence to cost $20,000.

Store and Office Building. W. E. Allen will erect a 3 story store and office building to cost $25,000.

WASHINGTON

Business Block, Aberdeen. Architect Watson Vernon prepared plans for 3 story brick and concrete building for Pacific States Telephone Co. to cost $30,000.

Business Block, North Yakima. J. L. Bass is building 2 story brick 75x90 business building.

School Building, Cheney. School District has voted a new school house to cost $29,000.

Business Building, Pasco. John Kerfoot erecting 2 story brick business building.

Business Building, Pasco. Wong How erecting 3 story concrete and brick business building.

Church Building, Raymond. Presbyterian Church will erect a new building.

Academy, Wenatchee. The Dominican Sisters are building an Academy to cost $20,000.

Factory Building, Sumner. The Fleischmann Yeast Co., of New York City, will build a branch factory building at a cost of $100,000.

Residence, Springdale. F. M. Dissell erecting residence to cost $6,000.

Business Building, Ellensburg. W. F. Gray will erect 2 story concrete business building to cost $20,000.

Warehouse, Cashmere. The Wenatchee Valley Fruit Growers' Association are erecting a brick veneer warehouse 50x150.

Round House and Shops, Pasco. The Northern Pacific completed plans for round house and shops to cost $240,000.

Business Building, Granger. The Olympia Brewing Co. prepared plans for 2 story 75x100 business building.

Water System, Centralia. Chehalis and Centralia will build a joint gravity water system at a cost of $115,000.

Warehouse, Tacoma. Union Meat Co. will erect reinforced concrete warehouse to cost $20,000.

Lodge Building, Aberdeen. The Loyal Order of Moose will erect a lodge and business building to cost $60,000.

Store and Hotel Building, Pasco. Architect V. W. Voorhees, Seattle, preparing plans for 3 story brick and concrete store and hotel building to cost $30,000.

Church Building, Colfax. Architect Alpheus Dudley, Seattle, prepared plans for 1 story frame and brick veneer church building to cost $15,000.

Union Depot, Aberdeen-Hoquiam. The Oregon-Washington R. & N. Co. and two other companies will join in the erection of a Union Depot to cost $70,000. A freight depot will also be built at a cost of $30,000.

IDAHO

Store Building, Kooskia. James Stewart is erecting 2 story brick 50x80 store building.

Store Building, St. Maries. W. H. Daney erecting 2 story brick concrete foundation business building.

Business Block, Twin Falls. C. M. Smith erecting 2 story 50x120 brick business block, to cost $12,500.

High School, Moscow. School District will erect high school to cost $65,000.

School House, Genesee. School District No. 5 will erect a new school building at a cost of $20,000.

BRITISH COLUMBIA

Hotel Building, Vancouver. Architects Perry & Nicolais prepared plans for 4 story brick hotel to cost $60,000.

Theatre, Vancouver. It is reported that Alex Pantages will erect an opera house at a cost of $400,000.

Warehouse, Vancouver. Buckley & Baker will erect 5 story brick warehouse to cost $27,000.

Warehouse, Victoria. Architect H. S. Griffiths prepared plans for the erection of a 6 story brick warehouse to cost $136,000.

Hotel and Store Building, Vancouver. Architect W. E. Pentecost prepared plans for 4 story brick store and hotel building to cost $30,000.

Hotel, Coalmont. D. Deane is erecting 3 story 55x76 hotel building to cost $30,000.

Modern Conveniences in Country Life

(Continued)

care and thought as would be given the home itself so far as the details are concerned.

Every water system should be large enough to afford an ample supply in case of emergencies, for it is there that its real value lies. It should be arranged so that all water is discharged under a constant pressure instead of a varying one as is usually the case. Never more than half of the available stored water should be taken out without the pump starting to renew the supply, and this renewal should go on while the rest is being used. All water used should be replaced in from one to one and a half hours and pumps should be large enough to do this.

When a new house is being planned and built, architects are, as a rule, the first ones on the job. It would seem therefore that the interests of their clients, as well as their own, would be very well served if they would give a little pertinent advice as to this important matter and see that the proper thing is done as to the water system.

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THE PACIFIC COAST ARCHITECT

A MONTHLY JOURNAL FOR THE ARCHITECTURAL INTERESTS OF THE PACIFIC COAST

OFFICE OF PUBLICATION

PORTLAND OREGON

TWENTY-FIVE CENTS A COPY · TWO DOLLARS AND A HALF A YEAR

VOLUME 2 OCTOBER, 1911 NUMBER 1

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The Pacific Coast Architect

VOLUME 2 PORTLAND, OREGON, OCTOBER 1911 NUMBER 1

COAST PUBLISHING COMPANY, PUBLISHERS

F. O. THOMSON, *Editor* F. O. CREASEY, *Treas.* L. J. FLYNN, *Advertising Mgr.*

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The Editor will be pleased to consider contributions of interest to the readers of this publication. When payment for same is desired this fact should be stated. Self addressed envelopes must accompany all such contributions.

ADVERTISING RATES ON APPLICATION TELEPHONE MAIN 5121

Current Comment

In Re the Auditorium site. We hate to do it but simply cannot, in view of the sharp criticism to which we were subjected for expressing our opinion as to the undesirability of the market site, refrain from saying, "We told you so."

We shall have the pleasure, in our next issue, of showing the prize renderings as well as the honorable mentions, if there be any, in the competition for the erection of the new Auditorium.

The cartoonist in a local paper recently gave a correct and most vivid portrayal of the Portland capitalist when asked to contribute to something which would prove of benefit to the city at large and these men in particular, if they could only be fitted with the proper kind of glasses. We refer to the effort to secure the establishment of a boat line to obtain at least a part of the trade which is now going to Seattle and San Francisco. We believe in boosting, first, last and all the time, but we are forced to the conclusion, harsh as it may seem, that a few first class funerals would work a miracle in the frowth of the fairest, and to be greatest city on the Pacific Coast.

Portland is a city of sub-divisions. The inhabitants live in the suburbs, not in the city proper. Why? Because some of the men referred to above are asking prohibitive prices for acres and acres of land within the near down-town residence district. With the imitation car service to which we seem to have fallen heir life is a burden to the man of moderate income, and Portland is stunted in the growth which is hers by right of location and everything else which nature has so bountifully showered upon her.

And while we are on this subject we want to say that many of the landlords of the main retail thoroughfares are becoming altogether too avaricious. The retailers cannot stand the tremendous strain in their rent account and slow but sure they are moving away from the clutches of the most hungry. Some day, if the Creator is not good in the meantime, they will awake when it is too late.

Of course we understand and thoroughly appreciate this is treason, in the minds of some of our very good supporters, but we have had this on our system for so long we simply had to get rid of it. At the same time we appreciate the fact that we are firing far above the heads of those we would like to reach.

And with it all, Portland goes "building on." A gain of 13 per cent, lucky thirteen, over the first nine months of last year, is a record of which we may well feel proud. Just think what would happen if—. But what's the use, time will adjust these handicaps under which we are making such glorious headway. Then, look out Seattle, San Francisco, and the rest of our sister cities. There will be nothing left but the shouting.

We Are Growing

Six short months ago we published the initial number of the PACIFIC COAST ARCHITECT. In spite of the efforts of our well (?) wishers to the contrary we have grown in advertising patronage and circulation in leaps and bounds until with this issue we can modestly claim that we are becoming a national proposition.

Following a postal card campaign among the architects of the entire country for subscriptions, we have added over a hundred subscribers to our list. Over one hundred architects were interested enough in what we of the coast are building to send in their subscriptions to our magazine, unsight, unseen—on the strength of a penny postal. These subscriptions come from the States of Minnesota, Wisconsin, Michigan, Ohio, New York, Maine, Massachusetts, Missouri, Tennessee, Florida, Louisiana, Texas, Nebraska, Utah and Iowa.

In the meantime we have not been unmindful of our own territory and sincerely believe that no publication of its kind has ever so thoroughly covered the coast states, including Montana, Idaho and British Columbia, as we are doing.

We are continuing the good work. We are becoming a national publication.

Cost of Concrete Houses

What is to be regretted in the development of concrete for house building is a seemingly erroneous idea as to cost. A "poured concrete house" at a remarkably low cost caught the fancy of the American public, and it seems as though everybody wants a concrete house, and—which is to be regretted—that they want it for next to nothing. When constructing engineers will make a specialty of house construction, fully equipped with interchangeable form outfits (either metal or wood) and when standards have been more fully established, the very low cost concrete house will come.

It willl come, but an earnest and united effort is necessary to bring it about. As Prof. Woolson said in his discussion of concrete as a fire-resisting material, we can only continue to patiently labor along lines we know to be right. The campaign of education, the change for the better of building requirements, and a better knowledge of concrete and its handling will bring to us a more economical structure.

In the meantime it is best not to make any claims about concrete for residence purposes, especially as regards cost, that are not based on actual experience. The problem of the small house at a low cost is for the mechanical engineer to solve. Concrete itself, plain or reinforced is, per cubic foot, a low-cost material. Equipment will be designed embodying forms which are readily adapted for any position, and methods of running concrete much cheaper than at present; or, as is being done already, factories or stone "foundries" at centrally located points, will deliver units for speedy and economical erection.

We believe in concrete. It is taxing our American skill and ingenuity to keep up with and apply its wonderful possibilities. In the meantime, the concrete house is low in cost, comparing more than favorably with any other construction, and offering the best value for money expended, but it is not "miraculously cheap," and any attempts to make it appear so, only harm its use.—*Cement Age.*

Hollow Block Silo

A vitrified clay block silo, built upon Meadowview farm, owned by A. P. Grout, near Winchester, Ill., in September, 1909, was immediately filled with ensilage and has proved a wonderful success since that time, showing no cracks.

This silo is 12 feet inside diameter, 40 feet high and has a capacity for 100 tons of ensilage. The bottom is 8 feet in the ground upon 10 inches of cement, which was poured in a hole 15 feet in diameter. Thirty-eight blocks are required for one course, and 53 courses will carry it to a height of 40 feet. This calls for, after deducting eight blocks for each of the six openings, 1996 blocks.

Hollow spaces in the blocks and the spaces between were filled with concrete and slightly tamped to fill all crevices. The silo was reinforced with two No. 9 galvanized wires placed in the grooves left for the purpose in the top of each course, and these wires are connected by short wires of the same size securely fastened to the horizontal wires above and below at a number of places. The openings are 24x36 inches. In making this silo 70 sacks of cement were used. No cost was kept of sand and gravel, as they were obtained from a creek bed on the farm. The blocks cost Mr. Grout 10 cents each, f. o. b. White Hall. The inner surface is hard and smooth and impervious to moisture and acids.

Mr. Grout is prominent in the work of the Illinois Farmers' Institute, and that organization, which is interested in the promotion of silos, together with other phases of scientific agriculture, will urge upon the farmers of the State the use of the cheaply constructed and perfectly satisfactory vitrified clay block silo.

Fair Buildings Begun

San Diego, Cal.—One of the most important events of the Summer on the Pacific Coast was the visit of John Barrett, personal representative of President Taft to San Diego, where he turned the first spadeful of earth for the Panama-California Exposition, July 19.

In Balboa Park, where the exposition is to be built, a special stand had been erected. Flags of all the nations of Central and South America, of the United States, and the President's flag were released by President Taft himself, who pressed a key in the White House at Washington at 7 o'clock Washington time, 4 o'clock San Diego time. As the buzzer on the stand at Balboa Park began to sound, Mr. Barrett suspended his address, and in company with Governors and representatives of Governors of Pacific Coast States, he took from Acting Director General Joseph W. Sefton a silver spade and thrusting it into the ground turned over a spadeful of earth. Others followed in order of their official precedence.

The ceremony began a four-day celebration that terminated in the great Mission pageant, when for the first time in history all the missions of California were shown in one grand picture, the most elaborate and beautiful ever seen on the Pacific Coast.

The celebration was an earnest of what the Panama-California Exposition is to be, its projectors intending to make it the most elaborate and beautiful exposition that has ever been built. It will make an especial appeal to the countries of Latin America and to the great Pacific Coast and the southwestern portion of the United States.

Active construction work on the first building, the administration building, to be a permanent affair, has been started. The managers expect to occupy the building by the 1st of January, 1912.

Guinea Pigs as Lawn Mowers

There was some good news during the past month in the consular reports from abroad. Good news, especially for pushers of lawn mowers who may be tired and weary from overwork, may be suffering from excessive heat, or possessed of the germs of laziness until they do not enjoy pushing the festive mower. The good news is in the report that the English have discovered that guinea pigs make successful lawn mowers.

Now who will ever call the English slow again? Slow either in point of humor or inventive genius. It is reported as a curious, but successful experiment made on private lawns in Kent, the idea being the novel one of substituting the guinea pigs for the lawn mower and the weed killer. It is said that a low wire barrier is arranged around the lawn and into the enclosure are turned guinea pigs and at once they attack the worst weeds—the plantains first, then the dandelions and the daisies. When they finish these they proceed to the grass and when this is finished it looks like the lawn has been cut with the closest machine. It is said also that the persistent cutting of the weeds by the guinea pigs kill them off, but they do not harm the grass, simply keep it mowed down.

It all sounds too good to be true, but wide circulation of this idea will probably beget enough belief inspired by hope that it will create an active demand for guinea pigs.

Site of the 'Frisco Exposition

The site finally decided upon for the location of the Panama-Pacific Exposition buildings is a happy combination of the three different sites contemplated, the San Francisco water front, the Harbor View district and Golden Gate Park—the commission has pleased everybody and has provided a scheme of boulevards, parks and buildings that presents untold possibilities for the architect and the landscape artist. Heretofore world's fairs have been massed into one section, so it will be something of a novelty to come to San Francisco and visit an exposition that embraces two-thirds of the city. A boulevard along the water-front will connect the several sites, and an intermural railroad, which will run along the south sides of Harbor View and the Presidio and then break off, skirting Lincoln Park and running through the Richmond district to Golden Gate Park, will afford still further access to the different points of interest.

The various features of the exposition grounds will be distributed as follows, according to the tentative plans under consideration:

Harbor View—Of the territory bounded by Fort Mason, Lombard street, the Presidio and the bay front it is proposed to utilize between 250 and 300 acres. Here will be located such heavy exhibits as the transportation (locomotive) machinery, and, perhaps, the manufacturers' building; also the concessions and other features that will constitute the night life of the exposition. It is not proposed to do any filling in at the water front, but to construct there a yacht harbor, an aquatic park and other water-front features of the exposition. An aquarium is suggested for the present site of the Fulton Iron Works.

The Presidio—It is expected that the United States Government will erect here its Government buildings and exhibits, which, it is suggested, could be afterward used for division headquarters.

Lincoln Park—Lincoln Park is to be devoted to scenic features, and for that purpose improved and beautified. A giant commemorative statue at the summit, commanding the entrance to the harbor, is contemplated. Picturesque cafes and gardens are to be located here.

Connecting Lincoln Park with Golden Gate Park it is proposed to utilize some 200 acres of land in the Richmond district. Here will be located the foreign, state and county buildings and the horticultural, electrical and other exhibits.

Golden Gate Park—Golden Gate Park is reserved for the construction of only permanent features that are calculated to add to its attractiveness without destroying any of its natural beauty. Here are to be located the museum and art gallery, also Japanese and Chinese gardens, fountains and statuary. It is proposed to make the stadium the finest in the world and to build a coliseum around it. Another feature will be a miniature Panama Canal connecting the lakes. Only the section west of Twentieth avenue to be used for exposition purposes.

Telegraph Hill—It is proposed to commemorate the use to which Telegraph Hill was put in early days by erecting thereon a large wireless station. The hill is to be terraced and a permanent observatory erected on the city park.

Other Features—The ferry at the foot of Market street is to be made the entrance to exposition city. There will be a grand court and, possibly, viaducts to conduct passengers from either side of Market street. Market street is to be improved and beautified; also Van Ness avenue. An auditorium or convention hall is designed for Van Ness avenue at Market street.

The main entrance to the exposition grounds will be located near Fort Mason, with others at Lincoln and Golden Gate Parks.

Another Skyscraper for New York

With the exception of the Eiffel tower, in Paris, the new Woolworth building at the west side of Broadway, between Park place and Barclay street, New York, of which Cass Gilbert is the architect, will be the tallest structure in the world. It will be 45 stories high.

According to the specifications, the Woolworth building will measure 750 feet from the door of the cupola down to the street level, and will contain more than 20,000 tons of steel girders. The cost of the building will be more than $7,500,000. The main structure will be 29 stories high, and will measure 152.1 feet on Broadway, 197.1 feet on Park place, and 192.6 feet on Barclay street. The main structure will be two stories higher on Park place and Barclay street than on Broadway.

One of the principal features of the building will be a tower, which will rise from the main structure to a further height of 366 feet. It will be 26 stories high, and 86 feet wide and 84 feet deep. On the top of this will be an electric light. On the 54th story will be the observatory. The first story on the street is designed for stores and an arcade, with openings on Broadway, Park place and Barclay street. The banking floor and mezzanine story on the Park place side will be occupied by the Irving National Exchange bank, and in the basement will be a safe deposit vault, a restaurant, and a barber shop equipped with a swimming tank. The machinery, cold storage, refrigerating plant, power plant, electric generators, filtration plant, and other mechanical equipment will be placed in the sub-basement.

There will be four self-containing stairways, which will run from the top of the tower to the streets. These will be separated from the corridors and offices by fireproof walls and wire-glass doors. They are expected to make the stairs not only fireproof but smokeproof as well. There will also be an outside stairway, which will be built in the court, accessible from the corridors on each wing. The elevators will also be inclosed with iron and wire-glass doors. There are to be 34 lifts for passenger service, 24 of which will be located near the Broadway entrance, arranged in four groups of six each. Sixteen elevators will be of the high-speed type, and six of these will run to the 30th floor, six to the 41st and four to the 51st floor. The cupola will be reached by way of a spiral stairway.

The total cubical contents of the Woolworth building, measured from the top of the caissons, exceeds 13,200,000 cubic feet. The caissons extend down to and are embedded upon, the solid rock from 110 feet to 120 feet below the level of the sidewalk.

The exterior of the building will be of stone and terra cotta, and it is stated that the design will be a combination of the Italian, French and modern renaissance throughout the main part, with Gothic steeples at the roof of the main structure.

Origin of Portland Cement

"What's this?" asked the city editor, glaring at the reporter. "Here you have in your story, 'The wall was built of Portland cement.' After this cut out the word 'Portland.' We don't want to advertise any particular brand of cement."

"I thought it meant Portland, Me., where it's made."

"It is none of your business to think anything. You are wrong, besides. It means Portland, Oregon, and the West must pay for all its advertising in this sheet or I'll know the reason why."—*Eastern Exchange.*

One Architect's Method of Dealing with Grafters

Scott N. Hughes gives an interesting account of the life of William Le Baron Jenney, the architect who died recently in California. It is instructive in many ways as to the very perplexing problem of how best to deal with the would-be grafter and briber. A portion of the article is as follows:

Jenney despised worse than anything the grafter, and his manner of dealing with that type of man was effective.

One day Jenney was in his private office when a man who wanted to provide certain materials for a building then under construction came in and approached John Ewen, then a "cub" in Jenney's office, with a flagrant bribe offer. He offered Mr. Ewen $50 if his material was used.

Mr. Ewen was seized with an inspiration. Instead of throwing the man out of the office, he said: "Mr. Jenney always handles that end of the business. Go in and see him." Then he awaited the explosion.

The man innocently approached Mr. Jenney and made the proposition.

"Sit down a moment," said Jenney, quietly. A moment later he looked up and said: "Young man, are you new in the business?"

"Yes, sir; I'm just starting. I want to get in right. My stuff is good, and I want a chance."

"Well," said Mr. Jenney, "there are two ways to do business. If you want to do the best kind of business, with the best firms, don't do as you have done today. I have no doubt that is the way to do business with some firms. If you are after that class of business, that is the proper way to get it. But if you want the best business don't approach any one as you have me. I'll give you the contract at your figures. If you can afford to give me $50, you can afford to knock $50 off the price to the owner. Let's reduce your figures $50 and give the builder the benefit."

The man agreed. He learned his lesson well, and he did business with Mr. Jenney for years. When Mr. Jenney died this man testified that it was that one business lesson that made him realize that the only way to do business is to do it straight.

When Mr. Jenney dismissed the man that day after signing agreements he stepped out smiling to Ewen and remarked: "Thought you'd have some fun with me, eh?"

Another and severer lesson he administered to a big contractor down town. This man was prominent socially, financially, and in religious circles, and through Jenney he got the contract for a skyscraper down town. One day, while the building was in course of construction, he entered Mr. Jenney's office and handed him a check.

"What's this for?" asked M. Jenney.

"It's the usual 10 per cent of the first payment—your share," he added, significantly.

Mr. Jenney took the check, chatted for a time with the man, and finally went into the workroom.

"What's the amount of that contract?" he asked Mr. Mundie, his partner. Mundie told him.

Jenney figured for a moment, muttered, "Yes, the amount is correct," and then he retired to his private office and endorsed the check over to the owner of the building.

Nothing more was heard of the matter until the end of the month, when the crooked contractor received from his bank a check endorsed both by Mr. Jenney and the owner of the building.

There was nothing for him to do but to take his medicine. He appeared in Jenney's office, probably expecting to be flayed for his tactics, but nothing of that sort happened. Mr. Jenney remarked:

"I am extremely glad to know that you can afford to make the lowest bid on a building and give the owner 10 per cent back and still make money on it, but don't you think it would be more businesslike just to subtract 10 per cent from the total contract price and save all this red tape by sending the check to me and having me endorse it over to the owner?"

The contractor humbly admitted that it was.

There was not a word of condemnation or reproof, and only a few who learned of it from the owner ever knew of the occurrence.

Mr. Jenney did not cast out that contractor, but continued to do business with him. And when Mr. Jenney built his own home he gave a contract for part of the material to this man—and the man skinned him.—*Architect and Engineer.*

New Theatre Built Like Telescope

DRESDEN, Sept. 15.—A wonderful theatre, opera house and circus arena combined, is springing into existence in Dresden under the auspices of the Saxon ministers of education and finance. In this marvelous building Caruso will be able to sing before 5000 people. Mark Antony will be able to address an audience of 4000 over the heads of 1000 Roman citizens, and, owing to the vast seating accommodation, Wagner, on a most magnificent scale, may be heard for 35 cents a head.

IS AMPHITHEATER.

The architect is responsible for the building, which is to make all this possible, is Herr Stosch Sorrasani, who has had vast experience in the building of coliseums and arenas. For the new building the Roman amphitheatre also forms the ground scheme; but at one side of the vast arena, with its tiers of seats, situated eccentrically like a smaller circle just within the circumference of a larger circle, an enormous dome thirty-six yards in diameter is being built.

Beneath this dome will be an ordinary theatre stage with all the usual equipment, while a hidden orchestra will divide the front of the stage from the arena floor. Thus, one day the open ring may be occupied by the tumbling clowns and performing elephants of the circus. The next day the arena floor may be sunk a few inches by hydraulic machinery, the fauteuils be extended right across to the orchestra, and Wagner opera may be played before 5000 people.

FLOOR SINKS AGAIN.

As soon as Lohengrin and his swan have disappeared, the fauteuils can be cleared away and the arena floor sunk to its greatest depth, from which a magnificent tier of terraced steps will rise to the highest point of the stage. Here the singers and musicians of the Ninth Symphony can be provided with an ideal resting place, or Mark Antony, from the steps of the capitol on the stage itself, can look down over all Rome to the outside limits of the arena floor.

The magnificent possibilities of this mountain-like show place have induced Herr Reinhardt, the famous organizer of pageants, to join forces with Herr Stosch Sorrasani, and Dresden in the future will witness some of the most colossal of spectacular productions. For instance, the three-storied "Faust"—heaven, earth and hell—will be produced here on a scale which has hitherto been impossible.

Personal Mention

Architect Robert F. Tegen, Swetland Building, was a recent visitor to Medford in connection with the hospital being erected there.

Martin Schacht has returned from an extended business trip to San Francisco.

Goodrich & Goodrich have been enjoying a visit from their mother, who resides in New York.

H. A. Whitney, of Whidden & Lewis, has returned from a month's trip in the East, stopping at Chicago, Detroit, Cleveland, Youngstown and Winona, Minn.

The firm of Kroner & Henn has dissolved partnership by mutual consent. Mr. Kroner will continue the office in the Worcester Building, while Mr. Henn will seek quarters elsewhere.

G. C. Nickerson, who installed the local office of the Western Building Material Co., October 1, 1907, and who has been their agent ever since, will take over the office of the Henry Cowell Lime & Cement Co., on November 1.

Walter Claussen, of Claussen & Claussen, has returned from a two weeks' vacation spent at Tillamook.

O. L. Broline has closed his office in the Board of Trade Building and has returned to his former home at Kingsbury, California, where he will practice during the winter.

R. E. Heine has returned from an extended trip to San Francisco.

Waldo F. Stewart, formerly located in the Spalding Building, has become financially interested in the Newberg Brick & Tile Co., and will act in the capacity of assistant to Manager Rogers.

Willcox & Sayward, Central Building, Seattle, have completed plans for the erection of a general hospital to be built at Pangkiachwang, Shantung, China.

Potter & Merrill, 219 Provident Building, Tacoma, have moved to 318 in the same building.

W. G. McPherson, of the W. G. McPherson Company, was the first public spirited citizen to offer a subscription of $1000 toward the operation of a boat line between Portland and Alaska.

N. J. Greening, formerly of Chicago, has succeeded O. J. Blum as local manager of the Brunswick-Balke-Collender Co. Mr. Blum will represent the company on the road.

Mayor Rushlight has appointed Guy Thornton and A. S. Lotspeich deputies in the office of the Building Inspector.

J. M. Nickum, of Nickum & Kelly, died recently at San Diego, where he had gone for his health.

Albert Held, of Spokane, has been named a member of the City Park Board of that place.

E. M. Wingate, formerly Mayor of The Dalles, has moved to Portland and will erect a home in the spring.

Emmett Jones has succeeded G. C. Nickerson as local agent of the Western Building Material Co.

In our last issue we inadvertently credited the New York office of Howells & Stokes with having prepared the second prize renderings in the competition for the erection of the State Capitol Buildings at Olympia. As a matter of fact, the work was performed at both the Seattle and New York offices, and credit should have been given in the caption.

Among the prominent cement manufacturers who recently held a conference in this city, were A. Coles, president of the Washington Portland Cement Company; Fred H. Muhs, of the Santa Cruz Cement Company; John Trainor, of the Riverside Portland Cement Company; J. Eden, of the Superior Portland Cement Company and P. W. Rochester, sales manager of the Washington Portland Cement Company.

J. W. Reid, of the firm of Reid Bros., San Francisco and Portland, was a recent visitor at the local office.

J. W. Shepherd, chemist for the Western Refining Company, has been confined to his home for the past two weeks with a sprained ankle.

E. E. Gilmer, of the Timms, Cress Company, is boasting the arrival of a brand new ten-pound boy.

Lifting Magnets—Invention That Has Changed Method of Handling Iron

The employment of lifting magnets has greatly simplified the handling of pig iron, steel and iron scrap, castings, rails and other miscellaneous magnetic matter.

The cost of handling the melting stock used by open hearth furnaces from cars to stock pile or from stock pile to the charging boxes has been reduced from approximately 8 cents a ton by hand methods to 2 cents a ton by the use of the lifting magnet in connection with suitable cranes.

It is a great convenience and saves time for the crane operator to be able to transfer an empty charging box to a new location without the help of a ground man or to be able to handle a heavy ingot or billet without waiting for chains or hooks to be attached. It is no unusual thing at some plants to unload 100,000 pounds of machine cast pig in thirty minutes with one magnet.

Rail butts and billets are difficult to handle by hand, but are easily taken care of by the magnet. At one plant handling billets from an indiscriminate pile the average of 790 lifts was 1710 pounds, and 675 tons were handled in thirteen hours and twenty minutes. At a puddling furnace 64,000 pounds of light bushling scrap were handled in twenty minutes.

It required four hours for a teamster and helper to load 1800 pounds of steel turnings from a lathe pit to a wagon. The turnings were long, heavy and tangled, from locomotive driving wheels. The magnet unloaded this wagon and put the turnings on the stock pile in three lifts. The time consumed was two and a half minutes.

Concrete Best for Elevator Enclosures

Recent disastrous fires in so-called fire-proof buildings have led to renewed consideration of the materials entering into their construction. Special attention is being paid to the general use of terra cotta or tile blocks for stairway and elevator enclosures, for which they are generally used. The material is conceded to be good for this purpose, but it does not work so satisfactorily when used for mounting fire doors at the necessary openings in such shafts. W. C. Robinson, of the Underwriters' Laboratories, chairman of the committee on fire protection covering for windows and door openings, of the National Fire Protection Association, declares as his personal opinion that tile and terra cotta blocks are not satisfactory for this purpose. He regards enclosures to vertical openings through buildings as ranking second only to fire walls in point of importance from the fire protection standpoint. Hollow building blocks often fail by the cracking away of the shells from the webs, due to the greater expansion of the shells. It is difficult to properly mount fire doors at the opening of tile and terra cotta shafts, as if structural steel is used, it is apt to expand under heat and cause failing of the tile walls. Mr. Robinson favors the use of reinforced concrete or brick with ample reinforcement properly anchored at each floor, as the materials best suited for elevator enclosures in fire-proof buildings.

Wrecking Task Big When Crews Try Skyscraper

What is going to happen when the ground on which a modern, re-enforced concrete building stands becomes so valuable that the structure has to come down to make way for a larger and more modern building; that is to say, a better income producer?

For instance, when Portland's population increases to 1,000,000 the block on which stands the Multnomah Hotel will in all probability be worth $2,500,000 or more. When that time comes, the eight-story hotel will be too small a building for so valuable a lot, and will have to come down. The problem will be how to wreck it. So far as the record shows, such a building has never been wrecked for the reason that the oldest re-enforced concrete building in the country is less than 15 years old and the necessity for wrecking one of them has not arisen.

John C. Sneckenberg, in charge of the testing laboratory and unsafe division of the Brooklyn (N. Y.) Bureau of Buildings, says that the problem of destroying a re-enforced concrete building will take the wreckers back to first principle, and that the problems faced by men of the stone age, when they wanted to make alterations in their cave homes, were the same that the wreckers of a modern re-enforced concrete house will have to struggle with.

"It has resolved itself into a question of brute force," said Mr. Sneckenberg, "and a lot of brute force at that. It is infinitely more trouble to tear down a re-enforced concrete building than it is to build one, and while the skill is not required, it will be found, I believe, that the cost will be very much more."

The use of modern re-enforced concrete for building construction goes back hardly 20 years, and there are few buildings of the most approved type that are 10 years old. For this reason, knowledge of the lasting qualities of cement can not be said to be complete, but from what we do know, the most ordinary house of brick or stone is at the peak of efficiency the moment it is completed. From that time it commences to deteriorate. The peak of efficiency in the case of a concrete house has not yet been determined; as concrete gets older, it becomes harder and more durable, provided, of course, the mixture was properly made.

The usual means of wrecking a house would not have the slightest effect on concrete. It is a case of a sledge, hammer, drill and dynamite.

Real estate men are agreed that the march of progress and improvement makes the present day skyscraper a back number in 20 years, so fast do invention and new ideas follow one on another. Of course, there are exceptions to this rule. There are some of Portland's largest buildings that were built for the future and they will in all probability be standing 50 years hence; but some so-called skyscrapers here will doubtless be wrecked before 1930, and displaced by larger and finer structures. The brick and stone and terra cotta construction is easily removed with pick and shovel. Even the steel skeleton type of houses may be torn down without prohibitive cost, but to induce concrete to release its hold in the re-enforcing bands of steel is quite another matter. These bands of steel are wound in and out of the masses, crossing and recrossing and lapping over each other, thoroughly tangled like the hair in milady's coiffure and infinitely harder to separate.

Mr. Sneckenberg, the Brooklyn official, gives it as his opinion that a concrete building can only be torn down by loosening the material with explosives and then breaking it free from the steel re-enforcement with heavy sledge hammers.

A concrete house, re-enforced, becomes what is called monolithic. It is just as if you chiseled the house out of a single block of stone, with the added strength furnished by the steel. It is a matter for quarrymen to handle to take it down. The suggestion has been made that acids could be used to disintegrate the concrete; but investigation proves that this method would be too expensive. Muriatic acid would dissolve the binder in the cement, but it would only penetrate a short distance before it would be overcome by the acids in the cement, with the result that an enormous amount of the muriatic acid would be required to do a small amount of wrecking. Sawing the building into blocks would be impossible for the reason that the hardest saw steel known could not cut through the steel re-enforcing.

The wrecking of concrete buildings is a matter that architects, builders and inventors would do well to consider. What is wanted is a method of construction that will not impair the value of the present method, yet will enable the building to be wrecked, for the demolition of a building in the long run should be considered part of the cost of construction.

Sue Depot Builder—Ellensburg Men Find They Cannot File Lien

Ellensburg, Wash.—Several Ellensburg business firms filed suits today against John Halloran, the contractor for the Northern Pacific passenger station at Ellensburg and the Fidelity Deposit Company of Maryland for sums aggregating several thousand dollars due them for labor and material on the passenger station. The Fidelity Deposit Company was on Halloran's bond and is made a party to the suit. The business men say that Halloran was unable to complete the building for the amount of his contract, and that as a result he was unable to pay his bills. He had bad luck with water and through various delays. Finding themselves unable to collect their accounts, the business men attempted to file a lien on the building, but found that in the last lien law passed by the legislature there is a section exempting railroad companies from the provisions of the law whenever the railroad company compels the head contractor to file a "good and sufficient bond."

The business men now find that they have no rights under the lien law and will have to recover their bills by civil suit against the bonding company.

Stirring Up the Home Spirit

Not for the first time, but repeating in a measure a campaign that has been waged periodically heretofore, the *American Lumberman* is urging the retail dealers in lumber throughout the country to stir up the home-building spirit, not only in their advertising, but in their talks when they come in contact with people. The idea is an excellent one, because it makes for the creation of new business in a way that brings permanent good to those among whom it is created. There is not a better theme than that of home building, and there is no fault to find with anyone who urges the people of his community to build better homes, even though the direct purpose of it may be to get more business for themselves by supplying the material for the building.

Progress in the Use of Aluminum

Generation Ago Little was Known of Metal—It was Regarded as Curiosity and Sold for $15 a Pound

A generation ago aluminum was little more than a curiosity. It was worth $15 or more a pound and its total production in the United States was less than 100 pounds a year, notwithstanding the fact that aluminum is the most abundant of all the metals in the earth's crust, of which aluminum oxide forms about 15 per cent. The great progress made in the industry is noted in the fact that a report on bauxite and aluminum for 1910, by W. C. Phelan, just published by the United States Geological Survey, shows a consumption in the United States in that year of 47,734,000 pounds, valued at nearly $12,000,000. The price has thus dropped from $1 an ounce to about 23 cents a pound.

Mr. Phelan states that although aluminum has in recent years become a most important economic metal, it is at present produced only from bauxite, a comparatively scarce mineral, and that even the great discovery which made this possible is only the first stage of wresting the metal from its various rock and earth combinations. Aluminum is an essential constituent of all important rocks except sandstone and limestone, and is found in all clays. The supply is therefore practically limited, awaiting only the perfection of a process for cheap extraction.

Mr. Phelan mentions a number of recently patented processes which show progress in the cheap extraction of the metal from the common source of supply. As aluminum in its various forms, both pure and as an alloy, possesses many remarkable qualities, it may be welcomed as a coming metal of great utility. Should it become as abundant and cheap a metal as may reasonably be expected, the industry holds boundless possibilities. An alloy called duralumin contains 90 to 95 per cent of aluminum, which at present prices would make it rather expensive, but it is claimed to have qualities as good as Bessemer steel, although it is only about one-third as heavy as iron or brass. It possesses great hardness, even when annealed. Another alloy of aluminum and copper is said to be a good imitation of gold; it polishes readily and takes a high luster and is well adapted to ornamental purposes. It is also highly resistant to chemical action and can be readily machined and rolled and drawn into wire. Aluminum may therefore have a wide future use, ranging from structural material to brooches and hatpins.

Many other important uses of aluminum are mentioned in Mr. Phelan's report, a copy of which may be obtained through application to the director of the Geological Survey, Washington, D. C.

The growth of the aluminum industry in the United States in 1910 is shown in the following table, 1883-1910:

Year.	Pounds.
1883	83
1885	283
1890	61,281
1895	920,000
1900	7,150,000
1905 (consumption)	11,347,000
1910 (consumption)	47,731,000

A Resume

Recent items selected from the Daily Advance Reports of The Pacific Coast Architect.

PORTLAND.

Residence. Architect W. B. Bell prepared plans for 2 story frame residence for Mrs. K. K. Fox, to cost $6000.

Residence. Architects Goodrich & Goodrich prepared plans for 2 story frame residence to cost $7000.

Hotel Building. Leonard Construction Co. erecting 2 story store and hotel building for Mrs. E. F. Goode, at a cost of $5000.

Residence. M. A. Zan erecting 2 story frame residence on Jeffery Avenue to cost $7500.

Church. Architects Jacobberger & Smith prepared plans for church building to be built in Irvington at a cost of $10,000.

Flats. Architects Jacobberger & Smith prepared plans for 2 story frame flat building for John Alstadt, to cost $7500.

Residence. Mautz Building & Investment Co. erecting 2½ story frame residence on East Fourteenth, to cost $5000.

Office and store building. Architects Doyte, Patterson & Beach are preparing plans for the erection of a 10 story Class A store and office building to be built on the corner of Washington and Fifth streets.

Apartment House. Architect D. B. Flickinger prepared plans pany to cost $350,000.

Residence. D. W. Zeller erecting 2 story frame residence on Grand avenue, to cost $5500.

Residence. Architects Bridges & Webber prepared plans for 2 story frame residence for Dr. Bruce.

Bank Building. Architect George Rae prepared plans for 2 story brick banking building for the Commercial State Bank, at Kelso, Washington, to cost $15,000.

Church Building. The Latter Day Saints will erect frame church building at East Twenty-fifth and East Madison streets, to cost $15,000.

Residence. Architect J. O. Wren prepared plans for 2½ story frame residence for B. Statter.

Residence. B. F. Moore erecting 2 story frame residence on East Fourteenth to cost $6000.

Residence. Mrs. E. R. Miller erecting 2 story frame residence on Knott street to cost $5000.

Moving Picture Theater. John Sullivan erecting 1 story brick moving picture theater at 703 Powell street to cost $5000.

Residence. W. L. Toole erecting 2½ story frame residence on East Washington street to cost $14,000.

Residence. E. G. Gordon erecting 2 story frame residence on East Davis street to cost $5600.

Hotel Building. Architects Doyle, Patterson & Beach are for 2 story frame apartment building to cost $8000.

Business and office building. Architects Reid Brothers, San Francisco and Portland, have prepared plans for a Class A office and business building for the Journal Publishing Com- preparing plans for the erection of a 12 story Class A building for the Oregon Hotel.

Residence. E. J. Mautz erecting 2½ story frame residence on East Twenty-second street to cost $6500.

Factory Building. The Pacific Specialty Co. are erecting a 2 story factory building to cost $6000.

Bank Building. The Gresham Bank will erect 2 story brick bank building to cost $15,000.

Apartment House. Harry Triplett will erect a 3 story brick apartment building at Fourteenth and Market streets, at a cost of $15,000.

Business Building. Architects Whidden & Lewis prepared plans for 12 story Class A business building to cost $350,000.

Residence. J. G. Mack erecting 2 story frame residence to cost $8000.

Flat Building. C. B. Webb will erect 2 story frame flat building on corner of Brainerd and Rodney streets, to cost $7500.

Residence. H. Gordon will erect 2½ story frame residence on Belmont street, to cost $7500.

Apartment House. Mrs. E. F. Goode will erect 4 story apartment house on Sixth and Everett streets, to cost $60,000.

Residence. B. T. Allyn prepared plans for 2 story frame residence for Joseph Chrudinsky to cost $7000.

Residence. Architect D. B. Flickinger prepared plans for 10 room frame residence to cost $8500.

Flat Building. Architect R. N. Hockenberry prepared plans for 2 story frame flat building to cost $5000.

Residence. Architects Bridges & Webber prepared plans for 1½ story frame residence for H. F. Morrow.

Residence. Architect C. H. Bristow prepared plans for 2 story 8 room residence for O. O. Hall, to cost $5500.

Apartment Building. Architect Newton C. Gaunt prepared plans for 11 story apartment building for Dr. J. C. Hanslmair, to cost $350,000.

Business Building. Architect Fred M. Legg prepared plans for 3 story brick business building for W. and M. E. Bruiman.

Residence. Architects Spencer-McCain Co. prepared plans for 2 story frame residence for W. L. Souders, to cost $5000.

Residence. H. M. Fancher & Co. prepared plans for 2 story 9 room frame residence for J. Manassa.

Business Building. Architect H. C. Dittrich prepared plans for 3 story brick business building for William Lind.

Residence. Architect Charles W. Henn prepared plans for residence for Mrs. L. S. Carter.

Warehouse. S. L. Brown is erecting a 4 story reinforced concrete warehouse at East First and Madison streets.

Business Building. Architects Doyle, Patterson & Beach prepared plans for a 9 story Class A business building for Woodward-Clarke & Co.

Business Block. P. Schuele & J. M. Wallace are building a 2 story brick business building to cost $15,000.

Business Building. Architects Williams & Rasmussen prepared plans for 12 story reinforced concrete hotel building, to be built at Twentieth and Everett streets.

OREGON.

Hotel, Ashland. D. Perozzi and E. T. Staples are building an addition to their hotel to cost $30,000.

Church, Albany. The Presbyterians will erect $25,000 church building.

Federal Building, Pendleton. Federal building will be built at a cost of $125,000.

Residence, Eugene. H. Hickson erecting 2 story frame residence.

Church Building, Wallowa. The Latter Day Saints will erect frame church building.

Gymnasium, Rainier. Architects Kroner & Henn, Portland, prepared plans for 2 story frame gymnasium in connection with the high school, to cost $5000.

School Building, Monroe. Alpine District No. 26 will erect 2 room school building.

Business Building, Albany. J. S. Magladry and J. W. Shumate will erect 2 story brick business building.

Depot, Roseburg. The Southern Pacific will build a new $22,000 depot.

Postoffice, Albany. A federal building will be erected here.

Business Building, Marshfield. W. S. Chandler will erect 5 story brick business building.

SEATTLE.

Apartment House. Architect Robert T. Knipe prepared plans for 4 story addition to apartment house, to cost $15,000.

Business Building. Engineers Weld & Thomas prepared plans for 6 story reinforced concrete building for Diamond Ice Company, to cost $100,000.

Office Building. Architects Howells & Stokes prepared plans for 11 story steel and concrete office building for the Cobb-Healy Investment Co., to cost $500,000.

County Building. The County Commissioners will erect a $50,000 building, corner of Fourth avenue and James street.

Bank Building. Oriental-American Bank will erect 2 story brick and concrete building to cost $25,000.

Business Building. Architect W. B. Van Siclen prepared plans for business building to cost $50,000.

Hotel Building. Architects Bebb & Mendel commissioned to draw plans for hotel for the Milwaukee Road at Rainier National Park, to cost $500,000.

Office Building. Architects Bebb & Mendel prepared plans for 9 story concrete and steel office building.

Business Building. Architect J. G. Johnson prepared plans for 3 story brick store and apartment building, to cost $30,000.

Sanitarium. Architect C. F. Hermann prepared plans for a sanitarium to be built at Lake Crescent, to cost $50,000.

SPOKANE.

Apartment Building. Architects Jones & Levesque prepared plans for apartment building for E. L. Rice, to cost $30,000.

Business Building. Mrs. Sarah Inman will erect 2 story brick and concrete building to cost $30,000.

Apartment Building. Jones & Levesque prepared plans for 5 story brick apartment building for Foster & Wachtman.

City Hall. Architect Julius Zittel is preparing plans for the erection of a steel and concrete 8 story city hall building.

Apartment Building. S. W. True will erect 2 story frame apartment to cost $8000.

Addition Hotel. Ridpath Hotel will erect 1 story brick addition at a cost of $10,000.

Cold Storage Warehouse. John Morrell & Co. will erect a $20,000 cold storage warehouse.

WASHINGTON.

Office Building, Sumas. The Sumas State Bank will erect 2 story brick office building.

Store and Flat Building, Tacoma. Architects Bullard & Hill prepared plans for store and flat building for Hill & Crawford.

Church Building, Colfax. Architect Alpheus Dudley, Seattle, prepared plans for Congregational Church building, to cost $12,000.

Freight Shed, Aberdeen. The O.-W. R. & N. will erect freight shed to cost $15,000.

School Building, Oakland. Architects Heath and Gove are preparing plans for 8 room school house.

Church Building, Walla Walla. Architect U. Grant Fay prepared plans for steel and brick church building, to cost $50,000.

Garage, Ellensburg. Bert Gartin will erect 2 story reinforced concrete garage, to cost $15,000.

Court House, Pasco. Architect C. Lewis Wilson, of Seattle, prepared plans for County Court House to cost $100,000.

BRITISH COLUMBIA.

Apartent House, Vancouver. George Simons will erect reinforced concrete apartment building, to cost $36,000.

Store Building, Victoria. D. Ker will erect store building to cost $40,000.

Addition School Building, Vancouver. An addition to the King Edward School will be built at a cost of $130,000.

Business Building, Victoria. Thomas R. Cusack will erect 2 story brick business building to cost $10,000.

Convent, Vancouver. The Madams of the Sacred Heart will erect a convent at Point Grey at a cost of $300,000.

City Hall, Prince Rupert. Architects Potter & Lailey prepared plans for a city hall to cost $20 000.

Office Building, Victoria. Architect Jesse M. Warren prepared plans for 6 story reinforced concrete office building to cost $125,000.

Business Building, Victoria. Kirkham Grocery Co. will erect 3 story brick business building to cost $20,000.

Prison Structures, Burnaby. The Government will construct prison buildings at a cost of $500,000

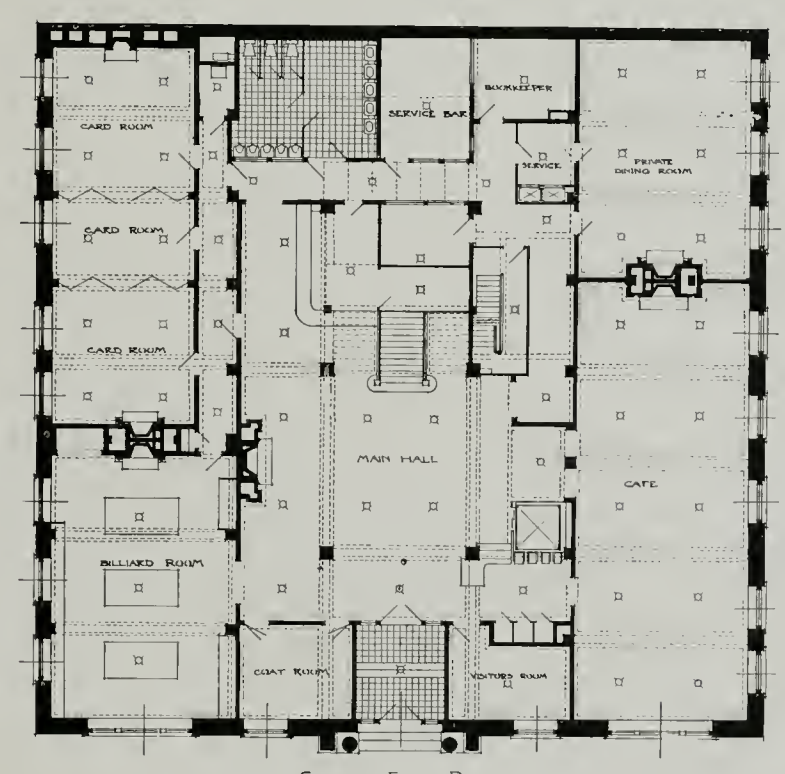
Poor Concrete Causes Trouble at St. Paul

Building Inspector Van Ornum of St. Paul, Minn., has taken a shot at cement foundations under wall dwellings—not as such, but because his forces have been finding walls put in by careless contractors which are sadly under the requirements. The ordinance requires concrete foundation walls shall be composed of one part of cement to three of sand and six of broken rock or gravel, but it has been found quite frequently that a mix of one of cement, seven or eight of sand and one of gravel had to answer. The inspector considers this sort of a wall unsafe, and will condemn any such that he may find. This is but another instance of how uncertain the concrete proposition may be in the hands of a reckless or thrifty contractor. Foundation walls of concrete are presumed to be all right, but they will not submit to having the concrete skinned out of the job and then produce a wall that will do good work. With such an uncertain line as a mixture of the character named would give, would be almost certain to allow unequal stress through a dwelling, causing settlement cracks to show in the plaster, throw doors out of line and twist finishing work to the general discredit of the work. A built-in sideboard which happened to rest over an especially weak place in the foundation wall, unless the supporting timbers or frame were strong enough to carry the strain, which they should not be required to do, might easily be sagged and strained, its mirror cracked and otherwise thrown out of true.

Elevation, Arlington Club, Portland
Whidden & Lewis, Architects

Main Lobby, Arlington Club, Portland
Whidden & Lewis, Architects

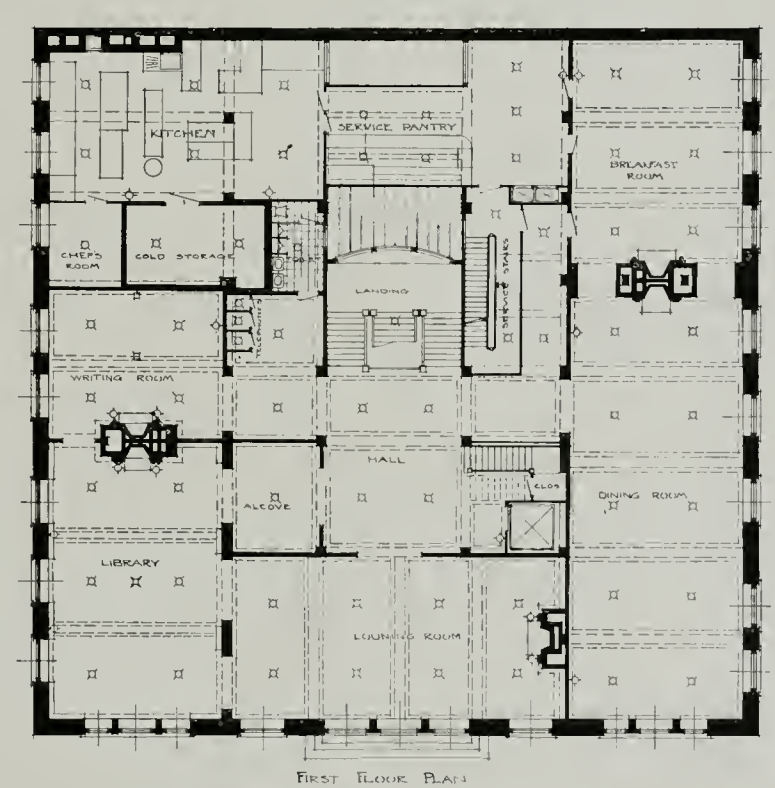
SCALE 8'ONE FOOT



GROUND FLOOR PLAN
Ground Floor Plan, Arlington Club, Portland
Whidden & Lewis, Architects

Library, Arlington Club, Portland
Whidden & Lewis, Architects

SCALE ⅛ INCH FOOT

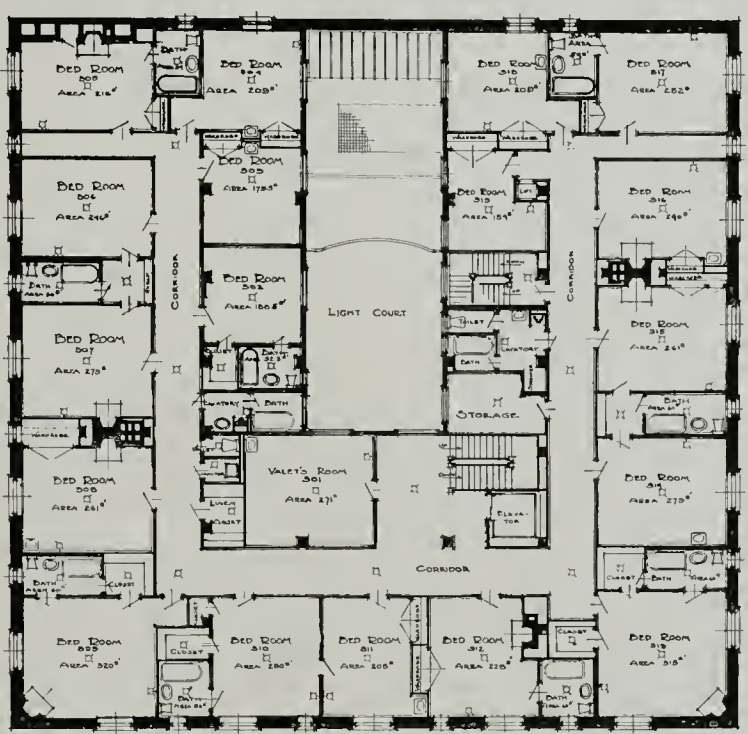


FIRST FLOOR PLAN

Second Floor Plan, Arlington Club, Portland
Whidden & Lewis, Architects

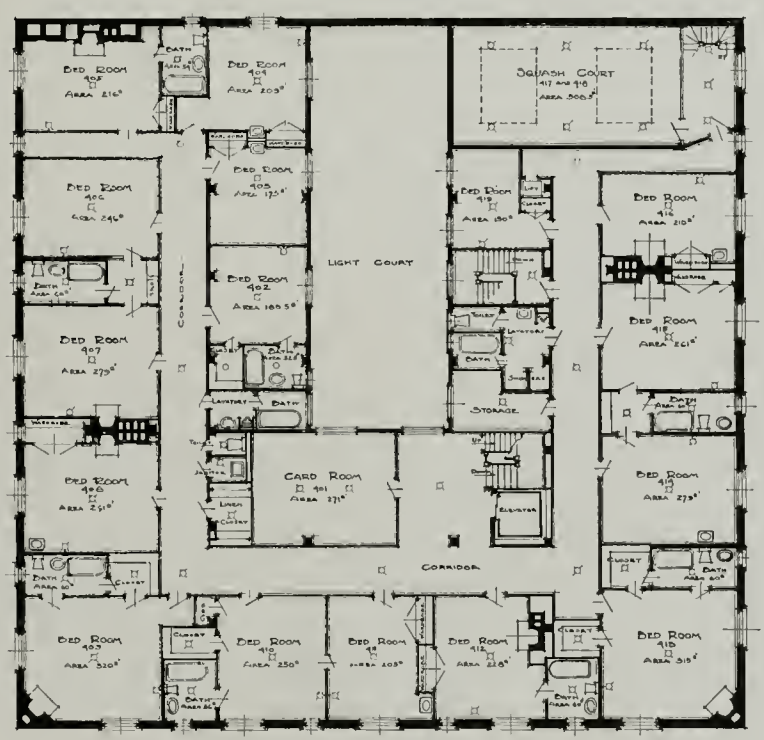
Lounging Room, Arlington Club, Portland
Whidden & Lewis, Architects

SCALE 1/8 INCH TO ONE FOOT



Writing Room, Arlington Club, Portland
Whidden & Lewis, Architects

SCALE 1/8 INCH FOOT


BED ROOM 402 AREA 216°
BED ROOM 404 AREA 203°
BATH
SQUASH COURT 417 AND 418 AREA 3003°
BED ROOM 405 AREA 175°
BED ROOM 406 AREA 246°
BED ROOM 419 AREA 180°
BED ROOM 412 AREA 210°
LIGHT COURT
BED ROOM 402 AREA 180.5°
BED ROOM 407 AREA 275°
BED ROOM 413 AREA 261°
STORAGE
BED ROOM 408 AREA 250°
CARD ROOM 401 AREA 271°
BED ROOM 414 AREA 273°
ELEVATOR
CORRIDOR
BED ROOM 403 AREA 320°
BED ROOM 410 AREA 250°
BED ROOM 411 AREA 208°
BED ROOM 416 AREA 228°
BED ROOM 415 AREA 315°

FOURTH FLOOR PLAN

Fourth Floor Plan, Arlington Club, Portland
Whidden & Lewis, Architects

Elevation, Yeon Building, Portland
Reid Brothers, San Francisco and Portland, Architects

Detail, Upper Floors, Yeon Building, Portland
Reid Brothers, San Francisco and Portland, Architects

Entrance to Elevators, Yeon Building, Portland
Reid Brothers, San Francisco and Portland, Architects

Elevation, Carlton Hotel, Portland
MacNaughton & Raymond, Architects

Part of Lobby, Carlton Hotel, Portland
MacNaughton & Raymond, Architects

Part of Lobby, Carlton Hotel, Portland
MacNaughton & Raymond, Architects

Elevation, Journal Building, Portland
Reid Brothers, San Francisco and Portland, Architects

Trade Notes

A. G. Whiteman, of the Oregon Art Tile Co., has returned from Medford, where the company has just completed the tile work in the Hotel Holland. The hotel contains 29 bathrooms and a large lobby, making a total of 3000 square feet.

The Columbia Elevator Company is busy installing their latest improved automatic electric dumb waiter in a number of modern apartment houses. This invention is the last word in dumb waiters and is meeting with considerable success.

The Newberg Brick & Tile Company furnished their "Newberg Red" for the Arlington Club.

It is rumored that C. C. Smith, sales manager of the Western Clay Co., is spending considerable of his time in Vancouver, Washington. We sincerely trust we are not going to lose the affable gentleman as a resident of Portland.

The Harris Ice Machine Works make a specialty of installing high grade refrigerating plants for hospitals, hotels, clubs and office buildings.

S. B. Cooke, of the Holmes Disappearing Bed Co., has returned from a six weeks' tour of the Canadian and Middle Western branches of the company. Mr. Cooke reports excellent business at all the agencies visited.

The Portland Bar Fixture Co., organized last July, has installed the complete bar outfit for J. A. Waddle, Second and Morrison streets. The fixtures are handsomely finished in dark green. This is the first outfit turned out by the new company and reflects well on their ability. They are also installing a complete outfit in the Raleigh Building for Louis Trummer & Co., and in the same building are fitting up a buffet for Steve Stephenson. They are also installing a new 50-foot counter and a 14-foot extension on the back bar for Peterson & Olson at First and Burnside streets.

Nitschke & Andrae have completed the ornamental plaster and stucco work on the People's Amusement Company's new building, West Park and Alder streets, and will do the ornamental plaster and stucco work on the Lents, Glencoe and Mt. Tabor schools. They have also completed the contract on the People's Amusement Company's building at Medford, Oregon.

The Portland Hardwood Floor Company laid the hardwood floors in the Arlington Club.

The Western Refining Company is now manufacturing the Beaver Brand house paints in all colors. The company reports a large shipment of machinery, which will be installed in their plant.

Olson & Co. has installed a dozen built-in refrigerators in the building of the McKenzie Realty Company at Alameda Park.

W. P. Fuller & Co. are completing the glazing for the Multnomah Hotel.

The Portland Sheet Metal Works did the roofing, sheet metal work, skylight and metal windows in the Arlington Club building, also furnished the underwriters' windows in the North Pacific College.

Parties are now negotiating with the Shope Concrete Products Company for the establishment of a plant at Aberdeen, Washington, for the purpose of manufacturing the Shope waterproof brick, which is meeting with much favor among the Portland trade.

The Pacific Lumber & Mfg. Co. has received a cargo of 1,700,000 feet of oak from Otaru, Japan.

The Morrison Electric Company has moved from 291 E. Morrison street to 351-353 E. Burnside street.

O. E. Heintz, president of the Pacific Iron Works, reports that the season just closed has been an exceptionally busy one. The shipment of material to points in Oregon, Washington and Idaho has been unusually large.

The Public Engineering Company is completing the installation of a sewage and garbage disposal plant at El Paso, Texas, which will cost $100,000.

The Western Clay Company has issued a handsome, loose-leaf, leather-bound album, showing photographs of buildings in which their brick has been used. The illustrations include business buildings, apartment buildings and many beautiful residences.

The P. L. Cherry Company announces that it has been appointed selling agents for the Newberg Face and Common Brick.

The Portland Iron & Wire Works has installed all the ornamental iron work in the North Pacific College, Oregon and East Sixth streets.

Gladding, McBean & Company, of San Francisco, furnished the terra cotta used in the Yeon Building.

The Portland Sand Co. is furnishing the sand and gravel for the new cement mills now in course of construction at Oswego, Oregon. They secured the contract following a test which proved their sand and gravel to be the best that could be obtained.

The Portland Tile & Mantel Co. has completed the tile work in the Northwest Building, corner Sixth and Washington streets. The firm recently established a record by laying over 500 square feet for the Friedman Clothing Co. between 10 P. M. Saturday and 10 P. M. Sunday. They also laid the tile in the bath room, sun parlor, vestibule floors and tile mantels in George A. Sear's residence.

The Columbia Elevator Co. installed three electric and one hydraulic dumb waiter in the Arlington Club. The electric dumb waiter installed in the Carlton Hotel, and running between the kitchen and dining room, makes about 600 trips each day.

The Denny-Renton Clay & Coal Co. has had to enlarge its plant to take care of the greatly increased business.

The Morrison Electric Co. is now in its new home at 351-353 E. Burnside, with an exceptionally fine line of high class lighting fixtures. Among the recently completed work are the fixtures installed in the Carlton Hotel, Simon Apartments, Haak-Burke Building, Smith Hotel, St. Josephs Hospital, Vancouver, and the residences of A. C. Potter, J. G. Mack, L. E. Kerns, Harry MacCormack and W. C. Bristol.

Watsonite flooring is a thing of the past. The Watsonite Floor & Roof Company, of Seattle, has gone into bankruptcy.

J. C. Bayer installed the skylights and underwriters' windows in the Yeon Building, roofing, skylights and ventilating system in the Multnomah Hotel, sheet metal work and fireproof windows in the Hotel Cook, Third and Main streets, and the fireproof windows in the Smith Building, Sixth and Main streets.

The Oregon Art Tile Company has the contract for the tile work in the Sisters' Hospital, being erected at Medford, Oregon.

The Newberg Brick & Tile Company has installed an oil burner system in their factory at Newberg, which will be in operation the first of the month.

The Western Clay Company has been remodeling and enlarging its offices in the Beck Building.

The Lithic Mfg. Co. did the Scagliola in the lobby and laid the Racolith flooring in the baths of the Fritz Apartments, also the Scagliola, altar, sanctuary rails and wainscoting in the St. Thomas Church at Couer d'Alene, Idaho.

J. D. Tresham Mfg. Company has opened a factory at 220-222 Grand avenue, where they will manufacture interior and exterior ornaments in staff, plaster relief, cement, Caen stone and Keene cement. They will also do modeling and carving. C. W. Heal is in charge.

J. C. Bayer is local representative for Gladding, McBean & Co.

The Oregon Hardware Company is now in its new quarters in the Worcester Building, where they will be pleased to greet their friends, both old and new.

The Spady Manufacturing Co. installed the show windows and fixtures in the new store of the Knight Shoe Company, Seventh and Morrison streets, and the interior finish and show windows in the Selling Building for Pallay & Worhas.

The tiling in the seventy-four bath rooms and lobby of the Carlton Hotel was laid by the Oregon Art Tile Co. The lobby, which covers an area of 4000 square feet, is the largest of its kind in the city. The tile is cream colored and is interspersed at irregular intervals with white dots, the double border being laid off in panels to correspond with the ceiling. The whole effect is pretty and extremely artistic.

The Clark-Kelly Manufacturing Company, manufacturers of store, bank and office fixtures of special design, is a new local industry. The company is equipped to do work for the most particular.

The Lithocrete Company has the contract for laying the floors at the New Scott Hotel, Dallas, Oregon.

Spokane Cement Show

A cement products exposition is proposed for Spokane, to be held some time during the coming winter, under the auspices of the Northwest Concrete Institute.

Every use of Portland cement will be illustrated, and the cost of concrete construction as compared with all other kinds of materials will be graphically shown. Interesting and instructive lectures will be given by experts on the use of cement.

The exhibition will probably be held in the armory, and there will be exhibits of all kinds of artificial stone, including art work, irrigation and drainage tile, sewer pipe, building blocks, street paving and reinforced concrete, as used both in building operations and in bridge construction.

There will be also a large variety of cement working tools and concrete mixers and other machinery.

The exposition will be the first public affair to be given by the Northwest Concrete Institute, an organization perfected by the leading contractors and engineers of Spokane, who are interested in the cement industry. The object of the institute is to spread correct information concerning the use of this modern building material, and to encourage the erection of permanent, safe and fireproof construction in all buildings undertaken in the Greater Northwest in the future.

An Embryo Architect

A popular conception of the architect's failing in completing a house within the estimate is illustrated in the story of the proud father who thought he discerned great architectural talent in his six-year-old son.

"Why," asked a neighbor, "does he draw well?"

"No," replied the father, "but he started a few days ago to build a henroop at an estimated cost of sixty-five cents, and it has already cost me about three dollars and a half."

The Kahn System

The Yeon Building and the Carlton Hotel, illustrated in the current issue, were constructed according to the Kahn system of reinforced concrete, and are striking examples of this method of construction in Portland and the Northwest, to say nothing of the several hundred buildings of the same construction in California.

The principal feature of the Kahn system is, of course, the Trussed Bar, with its rigidly attached shear members, giving additional strength to construction, but the Kahn products today number many articles. The Hy-Rib is extensively used for solid partitions and many lines of work. The various grades of lath, rib metal, column hooping, steel sash and concrete chemical products are nearly as well known as the Trussed Bar. The company has just opened a warehouse at 147 Front street, Portland, and from it goods will be distributed to all parts of the Northwest. In a few weeks the stock of Trus-Con joist hangers will be complete. These hangers have been in vogue in the East for many years and have demonstrated that they are the strongest manufactured. Now the Coast architects are to have the benefit of these superior hangers, as a full stock will be carried in Portland.

Many of the concrete buildings erected in Portland during the past seven years have contained some of the Kahn system products and some of them are Kahn system from top to bottom. Among notable examples are the Electric Building, Carlton Hotel, La Salle Hotel, Burke-Haak Building, White Garage, Packard Garage, East Side Garage, Lewis Building, Beck Building, Oregon Hotel Annex, Crane & Company Warehouse, Cudahy Packing Company, Couch Building and a number of other structures. In the state the Kahn system has been used in numerous buildings and bridges. Among the buildings recently completed is the First National Bank at The Dalles. Among the several buildings now under construction are the Wasco Mills at The Dalles, the Mt. Tabor and Rose City Park Schools, the Beall Building and the Mulkey Apartments of Portland and the engineers are designing four other buildings to be constructed in Portland next year.

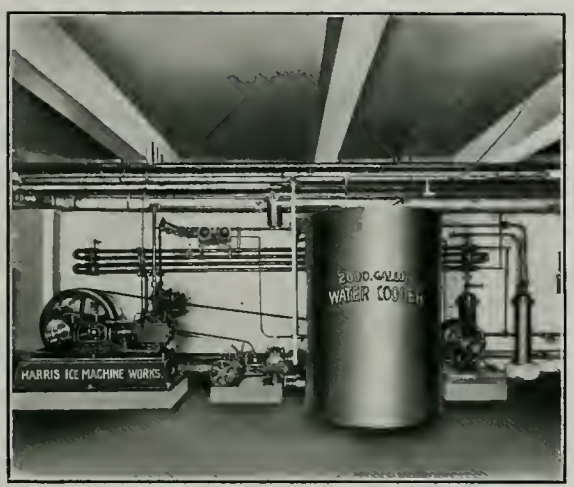
The company, in addition to just opening a warehouse in Portland, maintains a corps of engineers whose services are always at the disposal of architects without charge. The office in Portland is in charge of J. A. Currey as manager. The chief engineer is W. E. Lambert and his chief assistant is H. M. Boyajohn. The warehouse, just opened, while under the direction of Mr. Currey, will be in charge of E. R. Pelton, who has just come from the office of the company in Detroit. The offices will be moved from the Board of Trade Building to 1105-1106-1107 Wilcox Building on November 1.

Oak Flooring Idea

There is a new idea in oak flooring. In narrow strips this flooring has made great progress for several years now. The latest idea is to take these small units and fasten them together at the flooring plant, making them into broad boards, to facilitate laying. It is thought that this new idea will make oak flooring appeal more forcibly to the carpenters and builders, as the one objection they have urged against it has been the tediousness of laying and nailing it in small units.

Consideration of Tenants

All landlords are not considerate of the comfort and welfare of their tenants. It is the rule rather than the exception for owners of large office buildings to force the tenants to accept just what it may be their pleasure to give them as compensation for the monthly rent. To the renter and his employes, confined possibly in a small office which may be located on the sunny side of the building, some consideration for their personal comfort is due.



Water Cooling Plant Installed in the Yeon Building By the Harris Ice Machine Works

The owners of the Yeon Building, having the comfort as well as the convenience of their tenants at heart, have recently had installed a 2000-gallon water cooling plant by the Harris Ice Machine Works, 174 East Water street. The plant is giving excellent satisfaction and is one of the many installed in the largest hotels and office buildings west of the Rockies. With the multiplicity of office buildings being erected, the renter may soon have the privilege of demanding more than square feet and elevator service for his monthly rent.

Spokane Architectural Club

The first of a series of lectures on "The Achievements in the Field of Architecture" was delivered on the evening of October 17 by K. K. Cutter, on the subject, "Well-Designed Home and Grounds."

The lectures are given under the auspices of the Spokane Architectural Club. The dates of the other lectures and subjects are as follows:

October 17—"Architecturally Designed Engineering Structures," City Engineer Morton Macartney.

October 31—"A Well Planned Modern City," Ernest V. Price.

November 14—"The Architect's Relation to His Client." H. C. Whitehouse.

November 28—"Interior Decoration," C. Ferris White.

December 12—"Church Architecture," R. C. Sweatt.

December 26—"Architecture in Venice," J. M. Goodwin.

January 9—"Training for the Profession of Architecture," W. F. Dolke, Jr.

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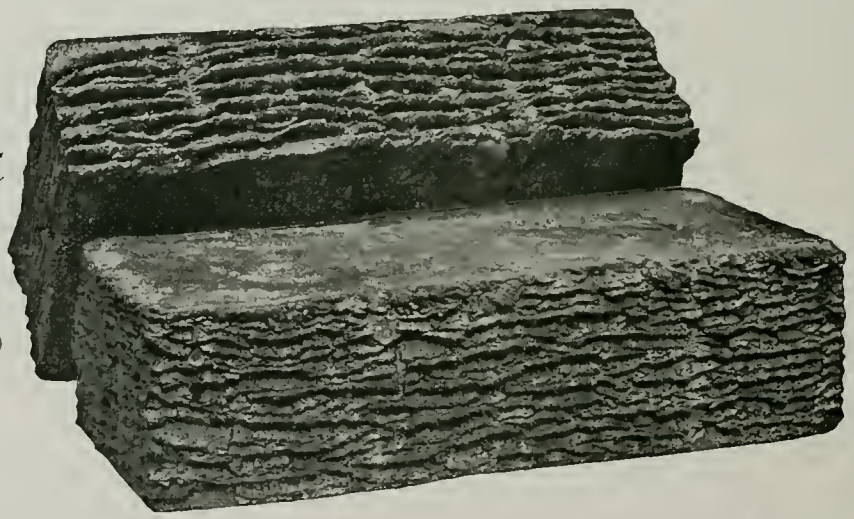

that has set the Architects and Artistic Owners of the East and Middle West on a new line of thought for Artistic Brick Work. It is made in about twenty shades, ranging from a rich light red through the several shades of brown and as dark as gunmetal in the Number 20. *We have a special proposition to the first party buying these brick in a carload lot in order to introduce them.*

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VOLUME 2 NOVEMBER, 1911 NUMBER 2

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ADVERTISING RATES ON APPLICATION TELEPHONE MARSHALL 236

Portland Auditorium Competition

We have devoted our illustrated section this month to showing the winners of prizes in the competition for the construction of Portland's $450,000 auditorium. We also present herewith a full report of the Committee of Judges, composed of K. K. Cutter, of Spokane, Willis L. Polk, of San Francisco, and the advisory architect of the Auditorium Committee, Ellis F. Lawrence. The selections made are from the renderings of sixty-five competitions.

Report of Auditorium Jury

Portland, Oregon, October 30, 1911.

To the Public Auditorium Commission of the City of Portland, Oregon:

Gentlemen: Your jury begs to report that in accordance with the program of architectural competition for the Public Auditorium to be erected in Portland, Oregon, sixty-five designs in said competition were received and examined.

We call your attention to the fact that most of the competitors substantially complied with the rules as set forth, and that insofar as the purposes of this competition are concerned, your commission has received in benefit all that may have been anticipated.

About one-third of the sixty-five competitors, in a general sense, analyzed the problem on practically identical lines. Their combined reasoning leads us to believe that their solution is the best. At the same time, we cannot refrain from pointing out that the majority of your competitors confused themselves as to conditions contained in the program to an extent sufficient to prevent them from presenting a plan simple enough to attract more than passing notice.

Assuming that the tentative site bounded by Second, Third and Clay streets is to be permanent, unless such a building as is contemplated would be important enough to form one of a group of buildings in one of the centers proposed in the plan for the improvement of Portland, presented at the instance of the Civic Improvement League by Mr. Edward H. Bennett, your jury bases its analysis of the designs submitted upon their adaptability to that site. For example, a building that would present a pleasing aspect in every respect upon this site might be entirely out of scale if imposed upon a site in proximity to the new county court house. In final analysis, the ability of competitors is measured in accordance with the skill they demonstrate in the solution of a problem definitely defined; therefore, in view of the uncertainty as to the final location of this building, it would appear that the real purpose of this competition is not the procurement of a plan, so much as it is the selection of an architect. With this in view, your jury, in considering the designs submitted, has given each in turn considerable study.

By reference to the program and by comparison of the solutions offered, your jury reached certain conclusions which are by them considered vital:

First. Simplicity of general plan and freedom of circulation.

Second. Reasonable flexibility. In other words, adaptability of the proposed building to its several purposes, such as:

(a) A convention hall, containing quarters for the Historical Society, small halls and accessory offices and studios.

(b) The adaptibility of the building to circuses, horse shows, etc.

(c) The adaptability of the building to grand opera. The program suggested the subdivision of the auditorium by movable or temporary stage appurtenances. Most of the solutions offered minimized this point and presented nothing more than such theater accommodations as are already possessed by your city.

The plan which we will in general recommend will be suitable for use as a grand opera house.

Again. Your jury feels that while the program presented a complex problem to most of your competitors, the most worthy have demonstrated their ability by finding a simple solution, and if for no other reason we deem that your competition has been a successful one.

First Prize—Of the many solutions offered, we have unanimously agreed that design No. 56 is pre-eminently the best and is therefore awarded by us the first prize. The author of this design frankly surmounts the difficulty of temporary stage equipment and gives a straightforward, simple solution of the whole problem, providing most completely for such temporary stage equipment as might be desirable. He presents a building which, in general character, would stamp itself at once as a public auditorium and would in every respect meet all the requirements of such a building. Ingress and egress of a large number of people are amply provided for.

Ample provision is made for a dignified housing of the Historical Society and for offices and studios. Of all the

plans submitted, we believe the quarters of the Historical Society, as set forth in this design, to be the most attractive.

The points of merit which we strongly recommend are the principal lobby or vestibule entrance the full length of the front of the building and its end entrances or exits, and free circulation entirely around the arena with supplemental exits on the east and west sides. These supplemental entrances were deemed by us to be inadequate and the same should be enlarged.

The stage on this plan, and, indeed, on practically all the plans submitted, should possess greater depth, so as to render it suitable for grand opera performances.

On the plan of the first gallery in this design, the space occupied for the banquet hall possesses the same flexibility as other parts of this plan; that is, it may be used as a banquet hall, or as a grand foyer in connection with the convention hall. At the same time, this hall may be used by the Historical Society, forming, as it were, the grand salon of the Society, giving it a sumptuous hall in addition to its regular quarters, its museum and its committee rooms. Special attention is called to this, as it points out the flexibility of the plan, indicating its superiority over practically all the other plans submitted. This plan, upon closer analysis, will reveal the possibility of a number of small halls for divers purposes and ample space for offices and studios.

This design, as well as many others, will be possible of execution along economical lines without sacrifice of its architectural character.

In some of the details of arrangement, further study will no doubt result in improvement, such as elimination of the proposed horse-lift and substitution therefor of an incline, occupying practically the same space, and the subdivision of the seating arrangement of the arena by additional cross or transverse aisles.

Finally, your jury feels confident that the Auditorium Commission may safely engage the author of this design as its architect, and after due and proper conference, rely upon his ability to construct for them and for the City of Portland a building worthy of its ideals.

In compliance with the program, it is the duty of your jury to award a second prize of $1,000, and three additional prizes of $500 each. The problem of making these awards has been a greater task upon the ability of your jury than that of selecting the first prize design.

Second Prize Design—No. 5: This shows general simplicity of plan, section and elevation. The quarters for the Historical Society are not so well arranged, nor are they of such attractive proportions as those provided for in the design awarded the first prize. It shows a greater depth of stage; the superstructure enclosing the rigging loft would better terminate in a pediment rather than in a flat entablature; the width of same is also lacking in proportion. While this design, in general, displays a firm handling of the classic order, its author has sacrificed the true principle of spacing without gaining anything in practical advantage; whereas, in the design awarded first prize, the practical requirements are satisfactorily covered and correct proportions and spacing have been preserved. This design, externally, has slightly more of an exposition character than an auditorium or opera house.

First Third Prize—Design No. 2: The general simplicity in plan, section and elevation is characteristic of the first and second prize designs. Freedom of circulation but inadequate provisions for Historical Society and studios. It is worthy of note that this competitor has not made any special effort in the way of careful rendering or of minute study in detail, but has been content to present simply the general lines of his design. The entrance to the arena at each side of the proscenium, with the organ space above, is a good feature. Unlike this on the first prize design, the floor of the stage and the floor of the arena are so arranged as to be on one level, affording direct entrance from stage to arena.

Second Third Prize—Design No. 31: The principal merit of this design is the freedom of circulation; no temporary stage equipment is provided; satisfactory provision, however, is made for the Hisorical Society. The interior is rather more of the character of an opera house than an auditorium. More than ample provisions have been made for boxes. The handling of the exterior is poor.

Third Third Prize—Design No. 11: This shows free circulation of general plan, a square auditorium possessing the admirable quality of bringing vast audiences nearer a common center than is indicated by any of the previous plans; insufficient exits from gallery space, subdivision of Historical Society and other accessories rather too complex and poor in proportion of interior effect; otherwise generally very pleasing.

Your jury has selected eight other designs as being worthy of special mention.

Design No. 41 possesses an attractive front elevation and a reasonably good general plan.

Design No. 15 is a well considered and consistently executed piece of classic work, but not regarded as indicating the purpose it is supposed to serve.

Design No. 18 is a well balanced auditorium, but inadequate entrances and exits and inferior accommodations for Historical Society. The stage in this design, as in many of the others, would not be suitable for grand opera productions and is also otherwise lacking in flexibility. The elevations of the Second and Third street fronts and of the alley are especially worthy of note and are far superior in character than the Clay street or front elevation.

Design No. 36 is a well balanced exterior with free circulation in plan. In many respects this design has attractive features. In general appearance externally it is more suitable for an art gallery than an auditorium.

No. 41. This design is especially worthy of note on account of the general plan, but the interior finish indicated on the longitudinal section is too much in the nature of an opera house. The front elevations cannot be commended in any way, owing to its misuse of the classic proportions.

Nos. 40 and 51 both show good architectural handling, but are lacking in circulation to such an extent that they could not be seriously considered.

No. 21 also shows a good general plan, but is weakened by complexity of minor details.

Movable Stages—Owing to the fact that the program and communications relative thereto left it optional with the competitors that the stage be either permanent or removable, the various solutions are worthy of note.

The first prize design relies primarily upon a permanent stage, but made adequate provision for a temporary stage, thus reducing the capacity of the main auditorium if desired.

Nos. 5, 2, 3, 4, 14, 44, 48 and 36 made no provision for permanent stage, but provided for cumbrous though rather ingenious removable stages. A number of the designs ingeniously arranged for the permanent stage to be reduced in size by movable proscenium arches.

Design No. 17 provided, instead of a removable stage, a revolving theater auditorium.

Nos. 54 and 18 provide simple removable stages with good general circulation, but no permanent stage.

Design No. 33 shows a removable stage with side balconies to swing out.

No. 6 shows ample provision for stage and swinging side balconies and permanent proscenium, cutting interior of auditorium practically in half, at the sacrifice of general proportion.

Design No. 12 shows a removable proscenium and stage, very simple; indicates direct reasoning.

Design No. 43 shows a permanent stage with a movable gallery to be wheeled from the front down to about the center of the auditorium.

Design No. 61 shows a permanent stage bisecting the auditorium at a sacrifice of interior proportion, with movable proscenium and swinging balconies.

Designs Nos. 57, 23 and 24 show removable proscenium and swinging side balconies.

In conclusion, your jury is more than pleased to report that they each of them personally consider this competition to have been arranged and conducted upon lines most highly approved by the American Institute of Architects, and wishes to express the belief that the action of the Auditorium Commission in instituting this competition upon the lines that have been followed has not only done a great service to the profession of architecture but has established a precedent which should be most mighly commended by the American Institute of Architects.

Each of the competitors is entitled to the thanks of your commission for the time and trouble that they have given to this problem.

In appreciation of the pleasure that has been coincident with our services in this respect, we desire to subscribe ourselves,

Most gratefully and sincerely yours.

Portland, Oregon, October 31, 1911.

To the Public Auditorium Commission of the City of Portland, Oregon:

Gentlemen: Your jury that reported to you upon the merits of the architectural competition for the proposed public auditorium has, in accordance with your request, examined into the merits of the several proposed sites that have been under consideration as the location for this building. Three of these sites are each in themselves possessed of characteristics which command attention.

The Market Block.

First—This being public property, the city being disposed to set the same aside for auditorium purposes, it apparently has the merit of availability upon economical grounds. It being but 200 feet square, it is not sufficient in area and it would be necessary to vacate Market Street between Second and Third streets and would require the purchase of at least 50 feet in depth of the property fronting on the south side of Market Street. Even with the additional land thus acquired, your proposed building would cover its entire area, leaving nothing but the actual street space surrounding a building to which it is anticipated that upon occasion as many as 10,000 people will be attracted. Such a building as you propose should first of all be so situated that it could not only be enlarged but be, at the same time, surrounded by open space of a greater width than adjacent streets. Finally, with regard to this location, we direct your attention to the fact that your proposed building, monumental in character as it may easily be, would practically be lost to you as forming one of any group of public buildings to which the people of Portland might point with pride.

Park Blocks.

The suggested purchase of an additional block of land adjoining the Park Blocks between the new County Court House and the City Hall, the converting of same into additional park space, placing the auditorium in the center of this combined area, thus converting your present park covering two blocks into two disconnected parks of one block each, cannot commend itself. That you would thus have by this method three public buildings, to-wit: The Court House, City Hall and Auditorium, facing upon these two small parks in a disorderly, inharmonious arrangement under a vain delusion that this would give you a civic center, or a group of buildings commensurate with such an ideal would not justify this location.

Exposition Site.

The property lying between Washington Street and the extension of Morrison Street, forming an irregular triangle, has been examined by us and would be of sufficient area for the purpose desired and leave additional space besides, with streets surrounding the four sides of the whole. This site would, in point of accessibility, be within easier reach from all parts of your city than either of the others under discussion.

Economy.

The claim that the Market Block should be most favorably considered for the reason that it is already owned by the city ought not to be seriously considered. The more property purchased by the city at the present time, the better off the city will be at any future time. This point ought not to require serious argument to demonstrate its truth.

Civic Center.

Portland has a unique opportunity to create a civic center and should not fail to take full advantage of same. An exhaustive study of the problem would result in a dignified group plan of a civic center, composed of the following public buildings now contemplated or of almost immediate future necessity, viz: The completed County Court House building, the new Postoffice, a new City Hall, the new Public Library building, and eventually a Museum of Fine Arts. It cannot be doubted but that shortly all these buildings will be under course of construction, and their final completion a public necessity within ten years. It will not cost the City of Portland any more to have these buildings so designed and so located that they will form a harmonious group than if same are scattered at various locations in a disconnected manner.

The Bennett Plan.

The City of Portland at the instance of the Civic Improvement League is in possession of a comprehensive plan containing an exhaustive analysis of the problems involved in its development and growth. Upon this plan you will find that the logical conclusions reached by Mr. Bennett (whom we, your jury, believe to be a most highly trained expert in city planning, no one else having, to our knowledge, specialized in this branch of our profession to the degree reached by him), located the Auditorium on the Exposition site.

In Conclusion.

We therefore unanimously recommend that your Commission adopt the Exposition site as the location for your proposed building.

ELLIS F. LAWRENCE,
KIRTLAND CUTTER,
WILLIS POLK.

New Quarters for Architectural Club

The new quarters of the Portland Architectural Club at 247½ Stark street, will be ready for the members within the next thirty days, at which time an exhibition of the work of local architects will be held. Upon the completion of the quarters, the Atelier will begin its work for the winter.

William P. Dawson and William H. Flanigen designed the rooms, and deserve much credit for their untiring efforts.

The entrance door will be embellished with a leaded glass panel into which will be worked the club seal. The coat room and toilets are placed in a convenient position. The toilet room will have a tile floor and wainscot, while the coat room will have a terrazzo floor. The hall, from which the office with its counters and accommodations is located, will have a wainscot of fir which will extend to the height of six feet, with a beam ceiling. The floor will be laid in a large red tile and with the natural stained woodwork and tinted walls will make a very pleasing effect.

From the hall opens the draughting room, which is 36x16 feet in dimensions and can accommodate a large class. There have been provided 25 lockers for the men in Atelier who will want them.

At the end of the hall is the social room, 26x26 feet. In this room will be two large fireplaces with tapestry brick facings and hearth; the plaster breasts above slope back, giving them quite the air of the old-time fireplace. Three sides of the room will be taken up with wide seats with leather cushions, which will work into the six-foot wainscot.

The club has started to accumulate a library, and for this purpose bookcases have been provided. Between the social and draughting rooms are large doors, so that in time of a dinner, etc., the rooms may be combined. This room, with its leaded glass windows and cove ceilings, will have a distinct English Gothic feeling.

There is also a kitchen and attendants' room, where the keeper of the club may be located.

The following is a list of firms who contributed time and labor to the completion of the new quarters:

Timms, Cress & Co., F. T. Crowe & Co., Oregon Hardware Co., Lithic Mfg. Co., M. L. Kline, J. C. English & Co., Pacific Iron Works, Oregon Art Tile Co., Fred W. Wagner, Portland Tile & Mantel Co., Hurley-Mason Co., J. D. Tresham, Lewis A. Hicks & Co., Muirhead & Murhard Co., Parelius Mfg. Co., J. S. Winters & Co., Brayton Eng. Co., R. J. Stewart, E. Bruns Co., I. Braida & Co., Sellick & McDonald, Peerless Mfg. Co., Gauld Co., Crane Co., West Coast Eng. Co., C. A. Wolfgang & Co., Versteeg Bros., Key Eng. Co., N. W. Door Co., J. S. Kilgreen, Northwest Steel Co., Nicolai & Neppach, Standard Brick Co., Hume & Co., Central Lumber Co.

Tacoma Building Ordinance

The new building ordinance of Tacoma has been passed by the City Commissioners and is now ready for the printers for publication.

Frederick Heath, architect, Tacoma, has suggested to the Municipal Commission of that city the employment of an architect to redraft the new building code, which is a voluminous document and is said to have so many repetitions as to make it hard to understand. C. T. F. Lundberg has been recommended to assist Building Inspector Giblett with the work.

City Engineer of Seattle Resigns

Seattle, Nov. 8.—Mayor G. W. Dilling has accepted the resignation of R. H. Thomson, who for nearly 20 years has been Seattle's city engineer. Thomson has been elected engineer for the Port of Seattle. A. H. Dimick, his principal assistant, has been appointed to the vacancy until further notice. In his letter Thomson states that he has continued in the position because he had undertaken the acquisition of the Cedar River watershed to insure a satisfactory water supply. This has been so well carried on, he states, that now he feels no further responsibility in this matter.

In his reply Mayor Dilling says: "The city owes you a debt of gratitude for long and valuable service. To you more than any man is due credit for the acquisition by the city of the Cedar River watershed, which has no superior among the water systems of the United States. It guarantees an ample supply of pure water for all time, and in addition, when fully developed, will furnish abundant electrical power."

Thomson is the father of Seattle's extensive regrade projects.

A Prominent Architect Visits United States

H. P. Berlago, a notable architect of Holland, who recently arrived in the United States for a five weeks' tour of the country, will visit many of the large cities between New York and Chicago, giving lectures to various schools of art and design, and also to study the general architecture of this country. Mr. Berlago is known as "Holland's American Architect," because of his modern ideas regarding design.

Arthur Putnam Improves

Word comes from San Francisco that the noted sculptor, Arthur Putnam, who suffered a stroke of paralysis caused by a tumor on the brain, will recover sufficiently to continue his work. This is good news for the Pacific Coast, as it is hoped that Mr. Putnam will be able to execute a large part of the important work in his line for the exposition.

Competition for Minneapolis Art Museum

The building committee of the Minneapolis Museum of Fine Arts has received acceptances to its invitation to submit plans for the proposed new art museum building from Carrere & Hastings, New York; McKim, Mead & White, New York; Shepley, Rutan & Coolidge, Boston; Pell & Corbett, New York, and Walter R. McCornack, Boston, the last to collaborate with Hewitt & Brown, of Minneapolis. Cass Gilbert, of New York, declined to enter, owing to a press of work.

Details of the competition have been prepared by John R. Van Derlip, of the Society of Fine Arts, and Professor Warren P. Laird, of Philadelphia, adviser to the building committee. The competition is to close December 15th. The selection of plans is to be made some time during the Winter. A competent jury will be named on the selection of designs, which are to be kept sealed as to authors. The jury will consist of three architects, including Professor Laird, and two museum experts. The competition is governed by the rules of the American Institute of Architects.

Personal Mention

Whitehouse & Fouilhoux have moved from the Lumbermens Bldg. to suite 809-13 Wilcox Bldg.

Whidden & Lewis have moved from the Corbett Bldg. to suite 1209-13 Wilcox Bldg.

C. W. Henn, formerly of Kroner & Henn, has opened an office at 425 Worcester Bldg.

Fred Claussen, of Claussen & Claussen, has been appointed a delegate to the Greater Portland Plans Association by the Progressive Business Men's Club.

R. E. Heine, local representative of Reid Bros., San Francisco, was a recent visitor to Seattle.

Albert Held, of Spokane, has returned from a two months' trip abroad.

C. M. Leonard, of the Leonard Construction Co., recently spent a few days at the local office of the company. Mr. Leonard is making an extended visit to the Coast cities.

H. H. James, 853 Montana street, who has been on the sick list for the past month, is now able to attend to business.

N. V. Murray will have charge of the advertising for the Southern Pacific, with offices on the sixth floor of the Wells-Fargo Bldg.

R. D. Grant, of the Leonard Construction Co., is in San Francisco on business.

B. R. Johnson, formerly in charge of the sewer and bridge work of the City Engineer's office, is now with the Denny-Renton Clay & Coal Co., of Seattle, and will have charge of the paving department on the Coast.

Fred Claussen, junior member of Claussen & Claussen, was married on the 15th inst. to Miss Dora Betz, of this city. They will be at home at 815 Borthwick street.

A. C. Jackson will have charge of the advertising department of the O.-W. R. & N., with offices at 701 Wells-Fargo Bldg.

L. A. Spear, manager of the Washington Brick, Lime & Sewer Pipe Co., of Spokane, was a recent visitor at the local office. Mr. Spear was on his way to Los Angeles, where he will join J. H. Spear, president of the company.

P. W. Rochester, manager sales and traffic of the Washington Portland Cement Co., was a recent caller at their local office on his way for a three weeks' trip to California.

J. D. Sullivan, president of the Sullivan Tile Co., is on a business trip to Vancouver, B. C., in the interests of the local company.

Heath & Grove, of Tacoma, were successful in the plan competition on designing the proposed city hall for Olympia, Wash. Plans were submitted by Blackwell & Baker, of Seattle; Sam G. Ward, of Olympia; and R. C. Baker, of Tacoma.

Merritt & Hall, with offices in the Burke Bldg., Seattle, and Jud Yoho, Henry Bldg., have consolidated under the firm name of the Craftsman Bungalow Co., and have opened offices at 419-21 Leary Bldg.

Rudolph Weaver has been appointed to the newly created office of professor of architecture by the Washington State College at Pullman.

Roy D. Rogers, of the architectural firm of Rogers & Jackson, with offices in the Northern Bank Building, Seattle, has returned from an extended trip in the East.

Louis Beezer, of the architectural firm of Beezer Bros., Northern Bank Building, Seattle, is on a trip through Western Washington and Montana in connection with construction work planned in those sections recently.

E. A. Crouchley, draughtsman for Bennes & Hendricks, was married recently to Miss Alene Adams.

E. D. Gatchell, architect and builder, formerly of North Yakima, has located at Pasco.

The local architects entertained Mr. Cutter of Spokane, and Mr. Polk, of San Francisco, members of the jury on the Auditorium Competition at luncheon before their return home.

Visit the Home of Famous Newberg Red

The Newberg Brick & Tile Co. recently acted as host to some 200 architects, contractors and realty men in a complimentary trip to the plant of the company at Newberg, Oregon. The special train, chartered by the company, proceeded direct to the plant, where it was met by a band and representatives of the Newberg Commercial Club.

The visitors were taken in charge by the officers of the company, Messrs. Rogers, Fuller and Stewart, and initiated into the mysteries of the manufacture of the famous "Newberg Red" brick.

The company has one of the largest, most complete and up-to-date plants for the manufacture of brick, tile and partition tile in this portion of the state and turn out an average of 40,000 bricks per day, besides considerable quantities of the other materials. Five kilns with an average capacity of 50,000 bricks each and using crude oil for fuel are kept in constant use and furnish steady employment for a force of from 45 to 50 men. The oil burners on the kilns have recently been installed in this plant and prove highly satisfactory, both in the saving of time and in the cost of fuel and labor. The drying plant is an immense affair, and is a splendid improvement over the old style way of trusting to the sun to drive the moisture out of the product before subjecting it to the heat of the furnace.

After a thorough inspection of the plant, the visitors took the train for the center of the city, where they again disembarked and were escorted to the rooms of the Commercial Club. J. D. Gordon, president of the Newberg Commercial Club, and N. C. Christenson, mayor of the city, welcomed the visitors to Newberg, and W. H. Chapin, of the Portland Realty Board; E. D. Timms, of the Timms-Cress Co., H. Y. Danforth, of the Builders' Exchange, and G. H. Rogers, of the Newberg Brick & Tile Co., made short addresses.

Big Bank Vault

The banking quarters for the Merchants National Bank, now under course of construction at Fourth and Washington streets, will contain one of the three largest bank vaults in the United States.

There are only two other vaults in the United States—one at the Chemical National Bank, New York City, and the other in the First National Bank, Chicago—which, it is said, compare in size with the new monster for the Merchants National Bank.

The method of construction of the vault is new to the Pacific Coast, but it is the same type being installed by the largest financial institutions of the East.

Some conception of the enormous size of this vault can be gained from the fact that the vault door alone will weigh approximately thirteen tons. It will take three full carloads of freight or 20 solid wagonloads to deliver this vault and the total weight of all materials used in its construction will be upwards of 100,000 pounds, or 50 tons.

The vault will be absolutely burglar, fire and water proof, equipped with the most modern time and combination locks. It will also be equipped with a special electrical arrangement which will signal police headquarters automatically in case safe is tampered with after it is once locked. The interior arrangement calls for the most elaborate section of collateral safes in use in the United States.

Trade Notes

The Pacific Iron Works is erecting a small steel structure for the Southern Pacific at the foot of Jefferson street to be used as a passenger depot. Also building a steel addition to the Willamette Pulp & Paper Co. plant at Oregon City.

T. K. Nickerson, formerly of the Western Building Material Co., has opened offices at 405-6 Railway Exchange Bldg., and will represent, in the local field, the Superior Portland Cement Co. and the Washington Portland Cement Co.

Lawrence Holmes, of the Holmes Disappearing Bed Co., was in Portland recently on a visit to the northern agencies.

The Trussed Concrete Steel Co., J. A. Currey, agent, has moved from the Board of Trade Bldg. to suite 1105-7 Wilcox Bldg.

The Sound Construction Co., of Seattle, has discontinued their local office in the Chamber of Commerce Bldg.

Galbraith & Telander, contractors, have moved from the Lewis Bldg. to 903 Chamber of Commerce Bldg. Mr. Telander is now in charge of the local office.

Western Building Co., have moved their offices from 816 to 801 Lewis Bldg.

The A. F. Cizel Sheet Metal Works, of Tacoma, Wash., installed the metal windows and the galvanized iron work and roofing on the Sunset Telephone Co. buildings at Tacoma and Aberdeen, Wash. Also the marquise on the California Wine House and the metal windows in the Sperry Flour Mills office building at Tacoma.

P. L. Cherry Co. has secured the agency for the Sun-Burst prisms for sidewalk lights.

The Morrison Electric Co. has moved to 351-353 East Burnside street, where they have large and commodious show rooms. Their exhibit of electric and gas fixtures is one of the largest and finest in the city. They will give special attention to contracting and wiring in all branches.

The Washington Brick, Lime & Sewer Pipe Co. has moved their office to 803 Lewis Bldg. They will furnish the Terra Cotta for the Belmont Apartments at Victoria, B. C.

I. J. Galbraith, of Galbraith & Telander has returned from a trip to Spokane.

R. A. Eldredge, manager of the Western Refining Co., has returned from an extended business trip to Puget Sound and Greys Harbor. He reports business conditions improving.

The Morrison Electric Co. did the electric wiring and conduit work for the Smith Hotel, Strong Bros. Hotel, and the Edwards & Daily Bldg. Also the residences of Judge Gantenbein, J. G. Mack and R. T. Lytle.

The Sullivan Tile Co. is furnishing the four and six-inch partition tile on the Lincoln High School and the three-inch tile on the Smith Hotel Bldg., Sixth and Main streets. In Vancouver, B. C., they have just finished the tile work in the Bank of Ottawa and the Vancouver Hotel Annex. In Salt Lake, Utah, they have completed the tile work on the Walker Bldg., and Redman Storage Warehouse.

Portland Tile and Mantel Co., 131 Eleventh street, did the tile work in the vestibule and entrance of the Mulkey Apartments. Tile front for the Portland Restaurant on Washington street and the tile work in four residences for M. J. Delahunt.

D. H. Lane, formerly with the J. C. English Co., has become identified with the Western Clay Co., and will devote his time to the sewer pipe sales. Mr. Lane is well known among the architects and trade in general and will make a distinct addition to the force of the genial sales-manager, C. C. Smith.

The Armstrong Machinery Co., of Spokane, has increased its capital stock $30,000 in order to take care of its growing ice and refrigerating machine business.

Three cement shows will be held by the Cements Products Exhibition Co., 72 West Adams street, Chicago, during the first three months of 1912. The places and dates are as follows: New York, Madison Square Garden, January 29 to February 3; Chicago, Coliseum, February 21 to February 28; Kansas City, Convention Hall, March 14 to March 21.

Hathaway Bros., contractors of Eugene, seem to have secured all their collections and left for parts unknown, much to the sorrow of certain Portland creditors.

Mahogany Scarce

Not long ago the Forestry Department at Washington issued a report on this subject in which the statement was made that the world's annual cut of genuine mahogany is only about 18,000,000 feet, while about 10,000,000 feet of so-called mahogany is consumed every year in the United States alone.

The Government scientists who investigate subjects of this character, say this does not mean that deliberate deception is being practiced, as it says the demand for true mahogany greatly exceeds the supply. There are more than 20 woods closely resembling mahogany that are now offered as the genuine article, and there are several other woods that are cleverly stained to imitate mahogany.

The Forest Service has just issued a leaflet to inform the users of cabinet woods of the distinguishing difference between real mahogany and the best imitation now on the market. The trade name of this wood is "Colombian mahogany." It is so called because it comes only from Colombia, the northernmost country in South America.

Not Mahogany at All.

It is not mahogany at all, but belongs to the monkey pod family, and is technically known as *cariniana pyrefonnis*, Colombian mahogany and true mahogany are botanically as unlike as oak and maple, but a superficial resemblance in the grain and color of the wood has made it possible to substitute the Colombian for the genuine mahogany. The Government writers suggest that since the trade name Colombian is a misnomer, it might be just as fitting and fairer to the public to call the wood by its graceful and scientific name, *cariniana*.

Wood Is Exported.

How long this wood has been used in the United States it is not known. It has been exported from Cartagena, Colombia, to Havre, France, for more than 35 years, and there sold in immense cargoes as genuine mahogany. Practically all the Colombian mahogany now marketed is cut at points from 100 to 200 miles inland and shipped from Cartagena. The trunks of the trees are straight and cylindrical, with a diameter of from 24 to 70 inches, with an average of about 36 inches, and often with a clear length of 50 feet.

Genuine mahogany is found in the West Indies, Central America, the west coast of Africa and the Philippines, Central America now being the chief source of supply. There are numerous near mahoganies found throughout tropical regions of the old and new worlds, but none of them passes the exquisite grain nor will they take the fine polish of the West Indian and Central American wood.

Meeting of the Philadelphia Chapter, A. I. A., Held November 13, 1911

The regular monthly meeting of the Philadelphia Chapter, A. I. A., was held on November 13th at five o'clock in the afternoon, in the rooms of the T Square Club.

On calling the meeting to order, the President, John Hall Rankin, who had been elected at the annual meeting in October, but was prevented from being present by illness, addressed the meeting briefly, after thanking the members for his election to the Presidency. He referred to the high standing of the Chapter in the Institute and to the large Institute membership, it being larger in proportion to its total membership than that of any of the larger Chapters. He laid special stress on the necessity for Committee work on the part of members, and described such work as a duty. The attention of members was called to the benefit derived by every reputable practitioner from the Institute and its work—consequently persistent refusal or neglect on the part of members to do their part when called upon, placed them in the unenviable position of accepting material benefit at the hands of their professional brethren without rendering a return.

Regarding new membership, he said, "While I do not advocate any departure from the wise conservatism that has been one of the characteristics of the Chapter, we should make from time to time such modifications in our policy as changed conditions render desirable. Our membership should be increased judiciously, and it is well to keep in mind that under the Institute By-Laws, requiring all applicants for Institute membership, first to be Chapter members, each Chapter becomes a training school, and Chapter membership a probationary state, for those desiring Institute membership. It is not necessary for candidates for Chapter membership to have all the qualifications required of Institute members, but it is essential for them to be of such material that they may become eligible for Institute membership."

After transacting routine business, changes in the By-Laws were taken up and adopted, Mr. Medary, the first Vice-President, occupying the chair during the discussion.

At six-thirty the meeting adjourned for an informal dinner at which twenty-three members were present. At eight o'clock the members gathered at the Historical Society of Pennsylvania to hear an address by Mr. Frank Miles Day, on "Congress Hall, Sixth and Chestnut Streets—A history of the fabric and some account of the intended restorations." The interest of the address was increased by lantern slides. Mr. Day described in circumstantial detail the work of the Chapter Committee, which covered a period of many years, and presented interesting examples of the difficulties to be surmounted.

The actual restoration has recently been placed by the Municipal Authorities in charge of the Chapter, and it is expected that the work will proceed promptly. Mr. C. A. Ziegler is Chairman of the Committee now in charge of the work.

Hard on the Paving Companies

A report from Philadelphia says that a negro fell from the third story window of a hotel and among the damages reported to the police was a crack in the cement pavement. Such reckless destruction ought to be suppressed. How can the poor paving companies hope to prove the wearing qualities of their respective pavements when such an individual as William Jackson, a negro, is at large?

United States Production of Lime

The total production of lime in 1910, according to a statement compiled by Ernest F. Burchard, just made public by the United States Geological Survey, was 3,469,416 short tons, valued at $13,809,290, as compared with 3,484,974 short tons, valued at $13,846,072, in 1909. This represents a slight decrease in tonnage, viz.: 15,558 tons, and a decrease in value of $36,782. The average price per ton in 1910 was $3.98, as compared with $3.97 1-3 in 1909, or an increase of two-thirds of a cent a ton.

The total number of producers reporting in 1910 was 1123, as compared with 1234 in 1909, a decrease of 111. This apparently large decrease in the number of producers was due partly to the inactivity of a number of small kilns operated by farmers for burning lime for local use as fertilizer and partly to the abandonment of old and worn-out kilns. The heaviest decrease in the number of producers was in Pennslyvania, but Porto Rico, Maryland, West Virginia and Wisconsin showed marked decreases. The five leading states in 1910 were, in the order of their production, Pennsylvania, Ohio, Wisconsin, Maine and Missouri. Pennsylvania produced in 1910 877,714 short tons of lime, valued at $2,440,350, the average price being $2.78 per ton. There were 572 active producers in Pennsylvania, including a considerable number of farmers who produce only a few hundred bushels each for fertilizer. The Pennsylvania production represented a decrease in quantity of 3725 short tons, and in value of $92,104, as compared with 1909, the price falling off nine cents per ton. In Ohio there were produced in 1910 415,285 short tons, valued at $1,647,335, representing an increase in quantity of 71,531 short tons and in value of $405,616. The average price per ton in 1910 was $3.97, which represented an increase of 35 cents over the price in 1909.

There were 36 producers in Ohio in 1910, as compared with 33 in 1909. In 1910 Wisconsin produced 248,238 short tons of lime, quarried from native rock, valued at $959,405, besides 21,000 tons burned from stone imported from other states. The stone imported from other states was mainly high-calcium limestone, the lime from which was used by beet sugar refiners. The 1910 production in Wisconsin, as compared with that of 1909, represents a decrease in quantity of 20,012 short tons, and in value of $108,095. The price per ton in 1910 was $3.86, as compared with $3.98 the preceding year, and there were 40 producers in 1910, as compared with 46 in 1909. Maine produced in 1910 179,656 short tons of lime, valued at $893,599, at an average price of $4.97 per ton. This represents an increase in quantity of 1092 tons, but a decrease in value of $64,091, and, in average price, of 39 cents. In 1910 there were seven producers, as compared with nine in 1909. Missouri produced in 1910 193,964 short tons of lime, valued at $837,681, the average value per ton being $4.32. As compared with the 1909 production this represents an increase in quantity of 11,504 tons and in value of $22,314, but a decrease in average price per ton of 15 cents. In 1910 26 operators reported production, as compared with 27 in 1909.

In 1910 there were 52 manufacturers of hydrated lime, as compared with 50 in 1909, and the production in 1910 was 320,818 short tons, valued at $1,288,789, an average price per ton of $4.02, as compared with 204,611 short tons, valued at $904,900, or an average price of $4.43 per ton in 1909.

Black Sand fields of Curry County, Oregon, are to be extensively worked by Idaho Black Sand Mining Company. The plant will be erected near Gold Beach, Oregon.

A Well Planned Modern City

Address Delivered by Ernest V. Price Before the Spokane Architectural Club.

"Probably no European city is visited by as many Americans as Paris, and millions of dollars are spent there every year by our people. This is not because Paris sets the fashions, nor because we are deeply interested in French history, nor because gloves are cheap or the Moulin Rouge gay. It is because Paris is the most beautiful city in the world."

Ernest V. Price, a local architect, who opened the Fall-Winter course of eduactional lectures under the direction of the Spokane Architectural Club and Spokane Builders' Exchange, said this in the course of an address upon "A Well Planned Modern City," in which he urged the people of Spokane to take immediate action in acquiring more property for municipal purposes. Continuing, he said in part:

"The palace of the Louvre is the civic center, in itself being nearly a half mile in length and a quarter of a mile in width, and with the vast gardens of the Tuilleries and the wonderful avenues leading from them to the Arch of Triumph, forms one of the most splendid vistas to be found. The groupings of the public buildings, the harmonious arrangement of the parks, the monuments, fountains and memorials all have cost millions and millions of francs, but no one questions that the expenditure has justified itself again and again.

"The moral is plain. Beauty pays; civic improvement pays. But how may we accomplish the realization of our possibilities? Taxpayers are often discouraged by looking at old-world examples of what may be done. It has taken so many years to do it and the scheme seems so bewilderingly elaborate and costly that they often seem impracticable and impossible.

"But if we take the fundamental principles of these good designs we will find that we can leave out many of the unessential features and adapt them to our own needs and uses. Nearly every progressive city in our country is doing just this. Philadelphia, Boston, Cleveland, Milwaukee, St. Louis and many others, east and west and south, are making big strides toward having well arranged plans and a 'City Beautiful' in the best sense of the phrase. They are taking thought today of the needs of tomorrow.

"American business men are a hard-headed lot, and they would not be doing these things if there was not a great economic value and need. Some towns discard the term 'City Bautiful' for 'City Practical,' but it is a blessed fact that if they get one they will get the other. The 'City Beautiful,' if taken up in the right way, means the city practical, the city useful, convenient, economical and healthful.

"A manufacturer went into a certain city not long ago with a view to locating. After he decided to locate he said: 'If you hadn't had a well planned town with open space to give the working people parks and recreation and pleasure grounds, I should have gone elsewhere. My working people are my biggest asset, and if they can live contentedly and happy it means dollars to me.'

"Scattered public buildings, no matter of what merit architecturally, are insignificant compared to a group of such structures. Most city structures are arranged in straight rows facing on the streets, a most undesirable system, when they might form a stately and imposing group. Place important buildings at the ends of avenues, if possible, so that they can be enjoyed and appreciated from a distance.

"To buy space enough at one time for a civic center is apt to be the most economical. If a small park or public building is created, the surrounding property is enhanced in value, and if the land is bought a little at a time, each successive purchase is at an increase.

"Charles M. Fassett, Commissioner of Public Utilities, has pointed out many splendid opportunities for making Spokane one of the most beautiful cities in the world. Nature has done much for us and we already have made a start at doing great things for ourselves.

"Is a civic center for Spokane possible? Aubrey Lee White, originator of the 'City Beautiful' movement in Spokane, planned a civic center at the south end of the Monroe Street Bridge, with the Spokane Club, the Federal building, the Catholic Cathedral and the Masonic Temple as parts of the scheme. It could have been done at that time for $100,000. Now it could not be accomplished for $1,500,000.

"So, unless we take action of some kind now, we shall regret it keenly. When Spokane has a population of 500,000 we will realize 'what might have been.' This is the time for action."

Common Drinking Cup

The crusade against the use of the common drinking cup in schools and public places seems to be steadily progressing. The State of Louisiana has lately fallen in line and has incorporated in its sanitary code a section relative to the compulsory use of individual drinking cups, and in towns or cities where there is a public water supply, sanitary drinking fountains are required.

Public drinking cups have also been prohibited in Denver, Colo., where the use of the bubbler type of drinking fountain is compulsory in public places and schools.

Personal Experience

We moved, the first of the month, and while awaiting the installation of our telephone, an exchange brought the following to our desk. We think it worth reproducing:

THE UNANSWERED PRAYER

Once in ages long forgotten,
In the days of flint and stone,
I applied in fear and trembling,
Praying for a telephone.

All the world was young and happy,
Now I'm old and worn and gray;
Yet the telephonic liars
Promised me that 'phone next day.

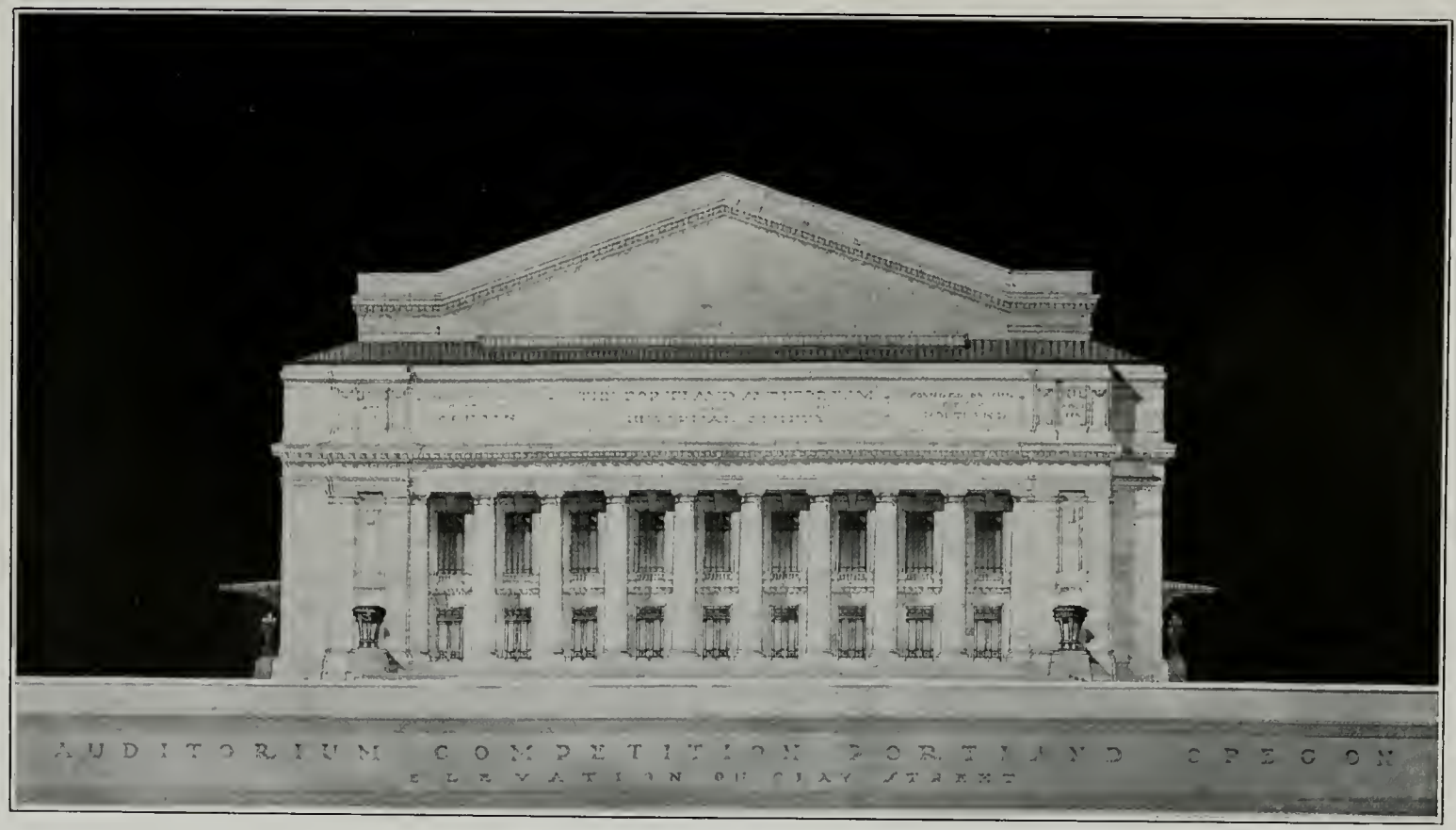
From their office to my dwelling
All the path is strewn with bones
Of the dead who've died while waiting
To receive their telephones.

And my children's children ask me:
"Grandpa, shall we ever own,
If we live as long as you have,
Each of us a telephone?"

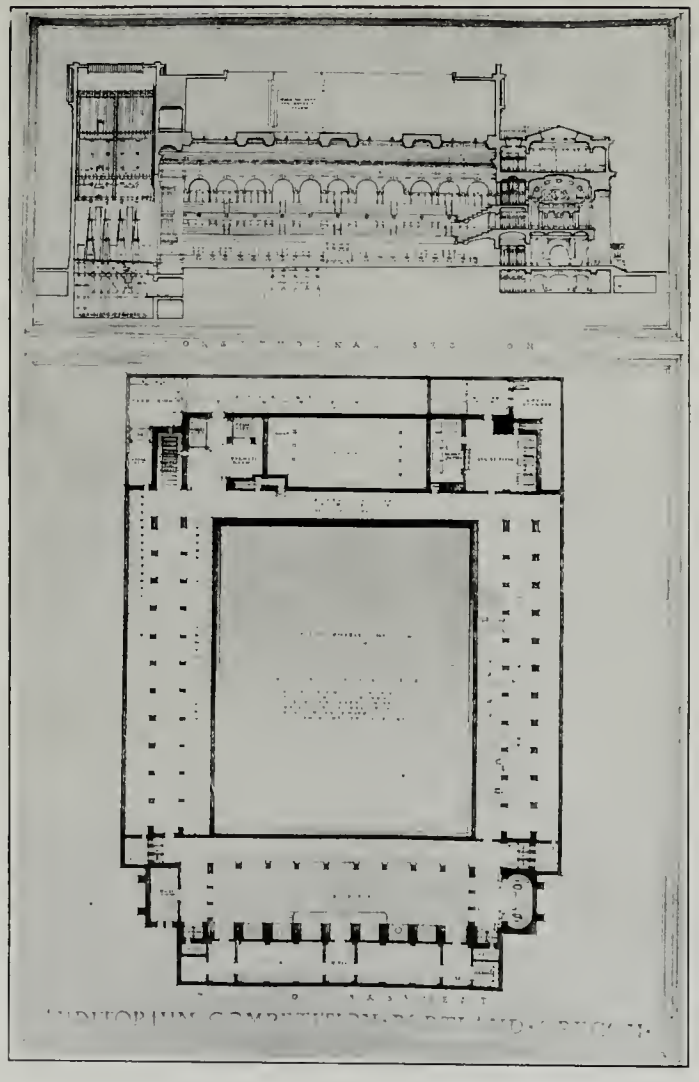
And I answer: "Keep on trusting;
Time will tell what's now unknown;
If not here, perhaps hereafter,
You may have a telephone."

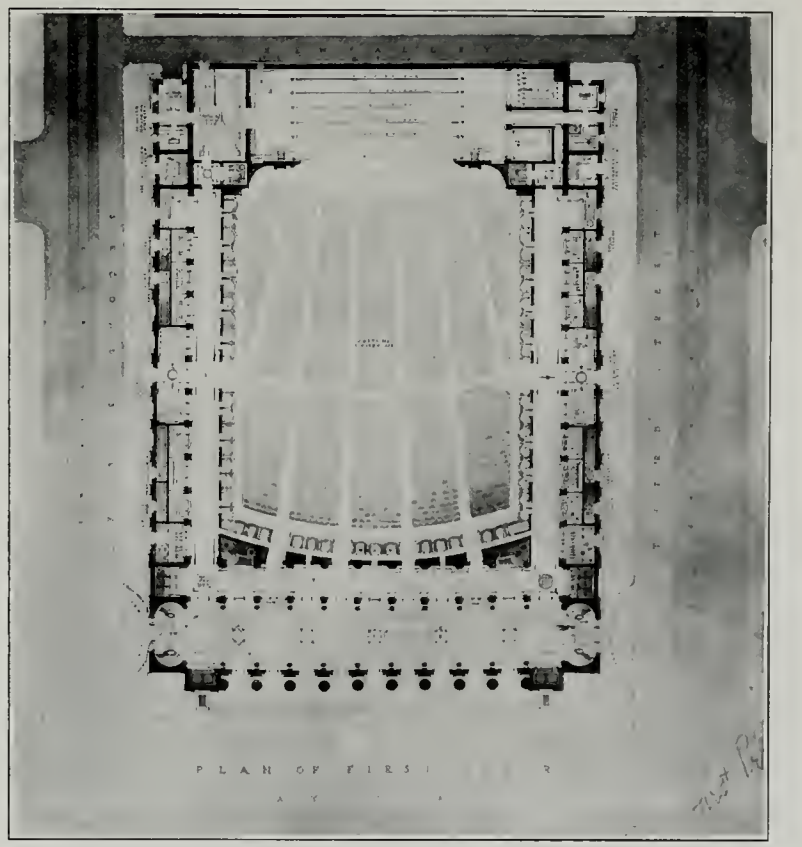
L'Envoi.

If you want proficient liars,
Those to whom the truth's unknown,
Seek them at the city office—
Ask them for a telephone.

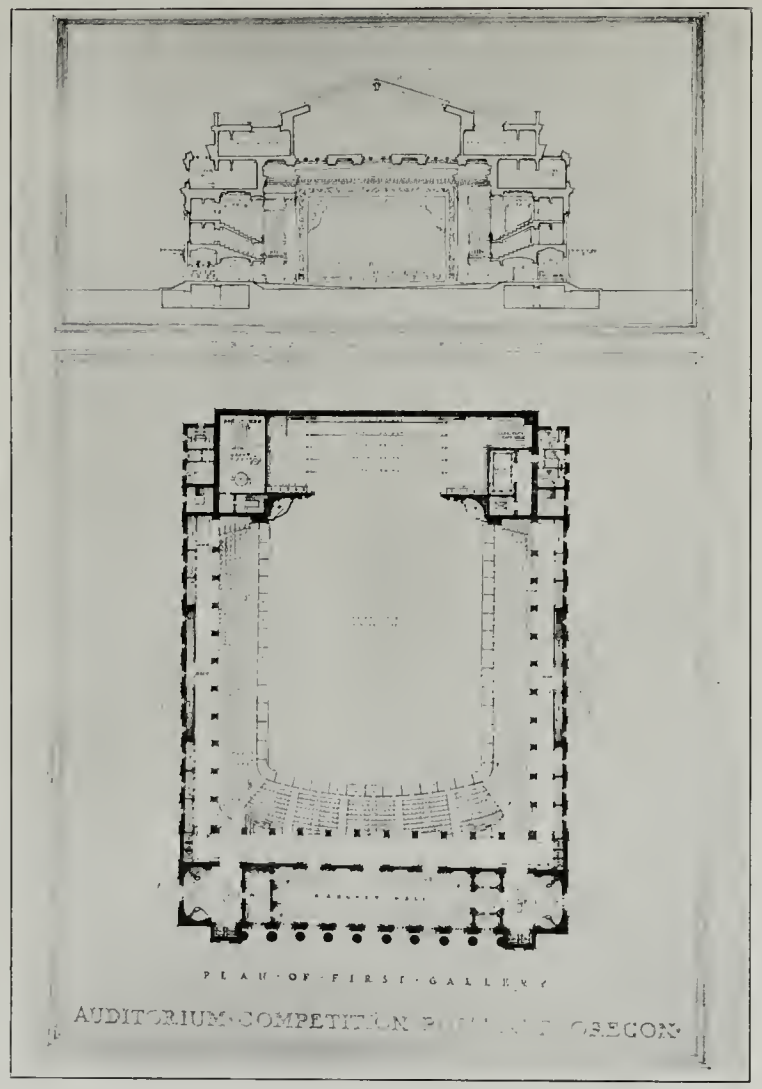


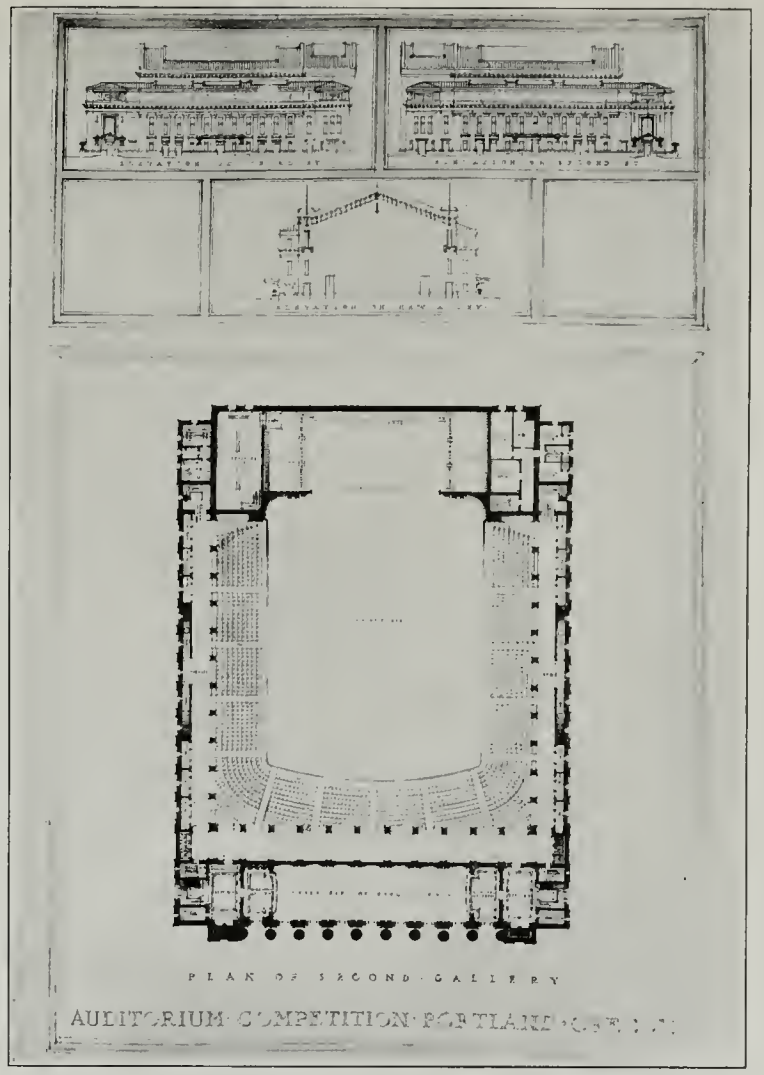
Front Elevation, Winning Design, Portland Auditorium Competition
Freedlander and Seymour, Architects, New York City





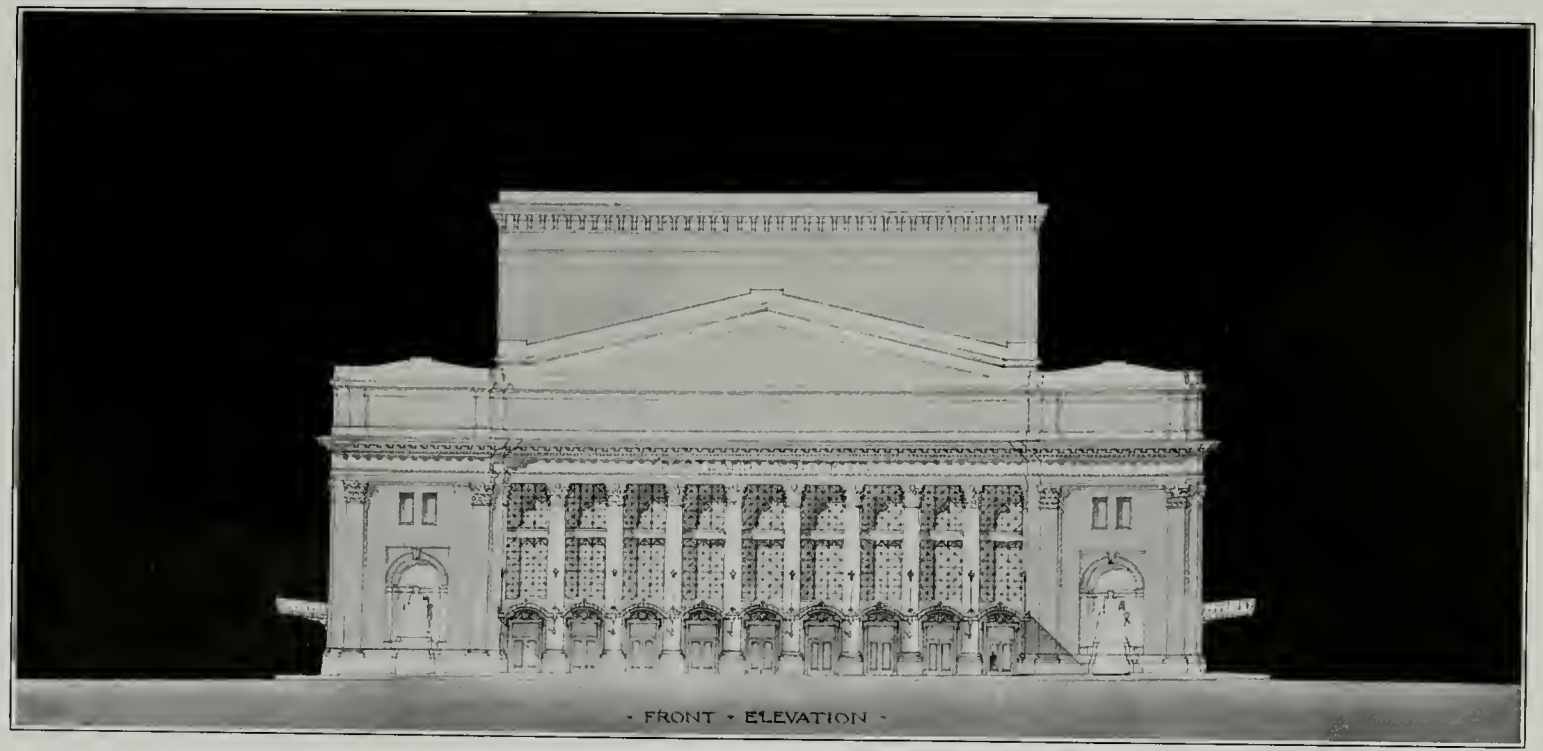
Basement and First Floor Plans, Winning Design. Portland Auditorium Competition
Freedlander and Seymour, Architects, New York City



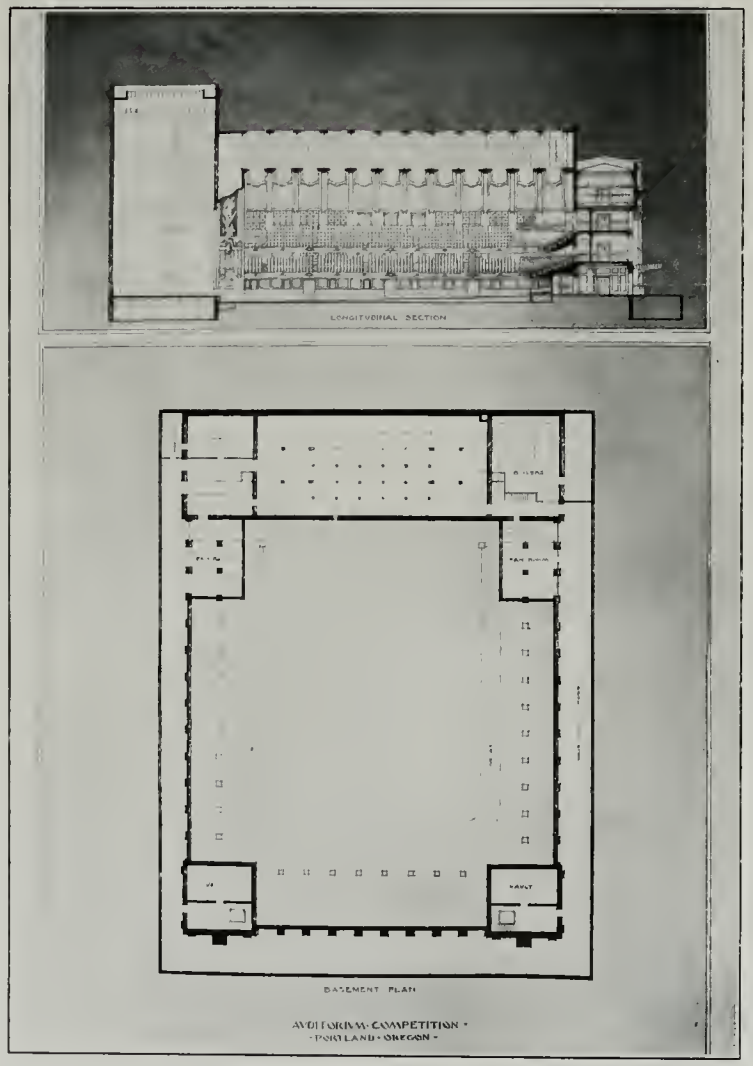


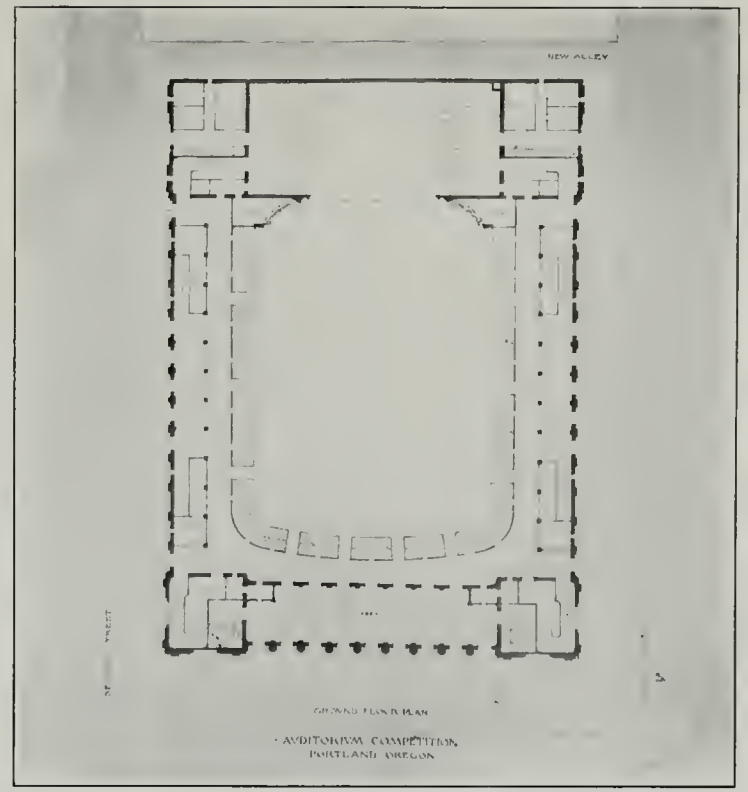
First and Second Gallery Plans, Winning Design, Portland Auditorium Competition
Freelander and Seymour, Architects, New York City

PACIFIC COAST ARCHITECT
NOVEMBER, 1911



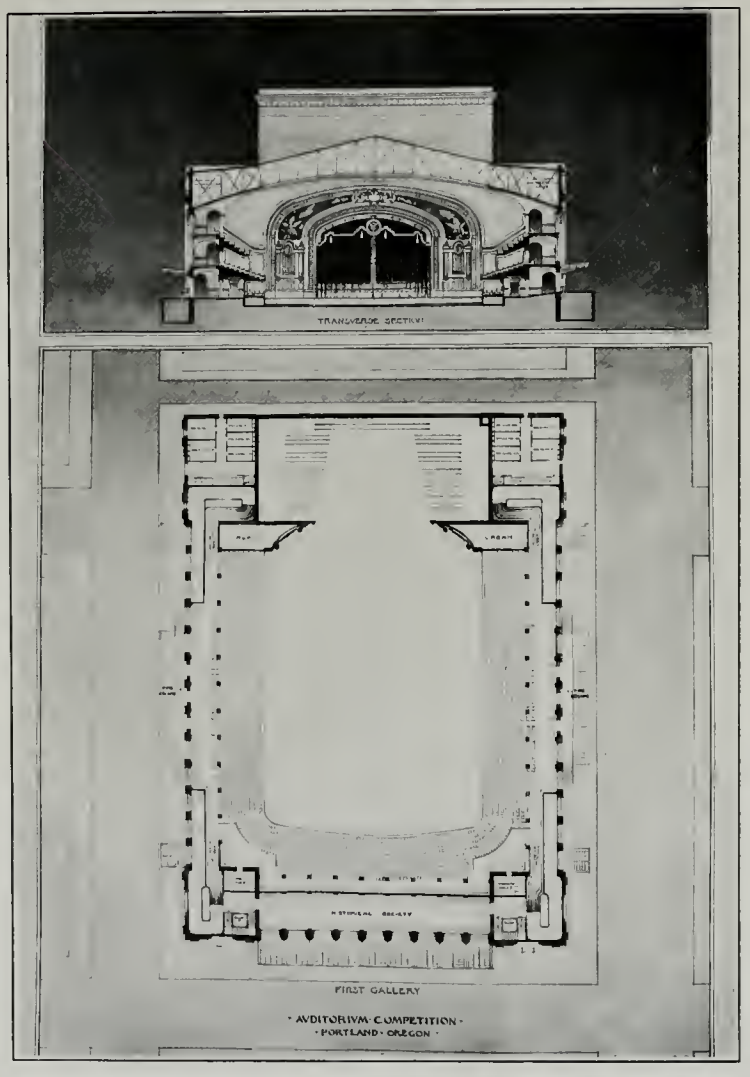
Second Prize, Portland Auditorium Competition
Lazarus and Logan, Architects, Portland

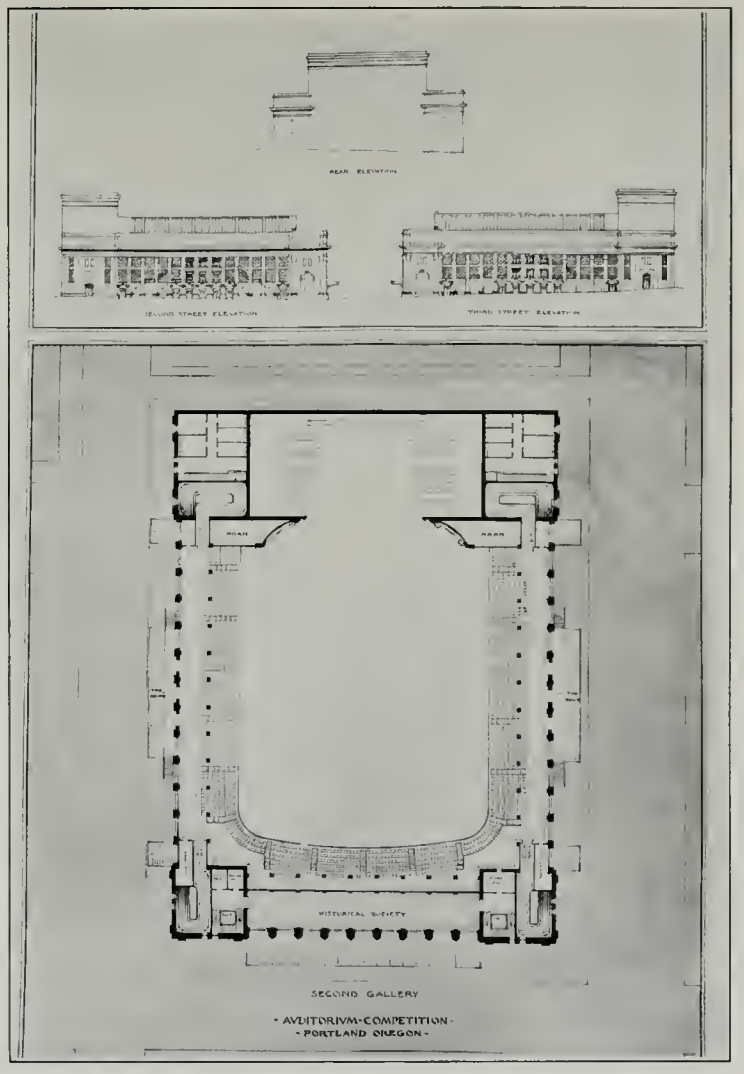




Basement and Ground Floor Plans, Portland Auditorium Competition
Lazarus and Logan, Architects, Portland

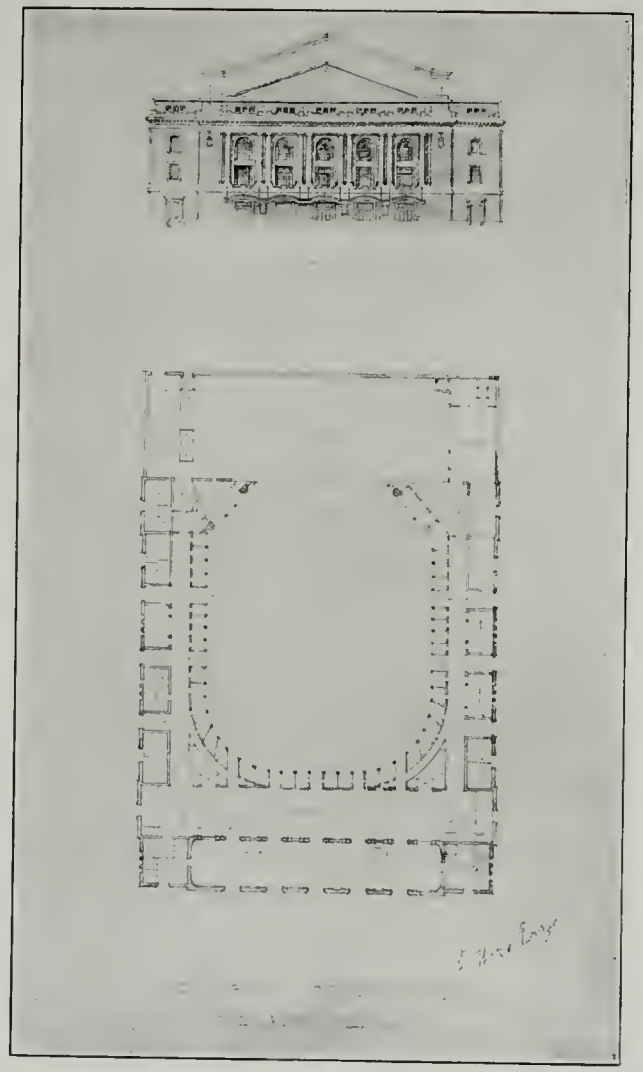
PACIFIC COAST ARCHITECT
NOVEMBER, 1911

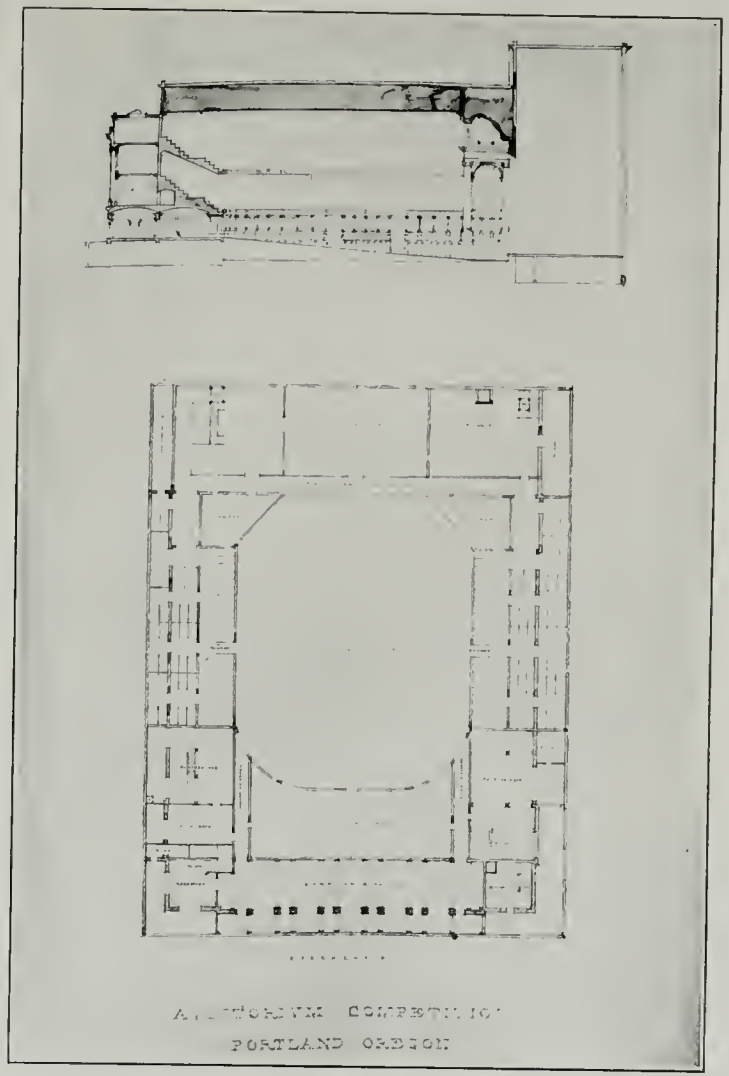




First and Second Gallery Plans, Portland Auditorium Competition

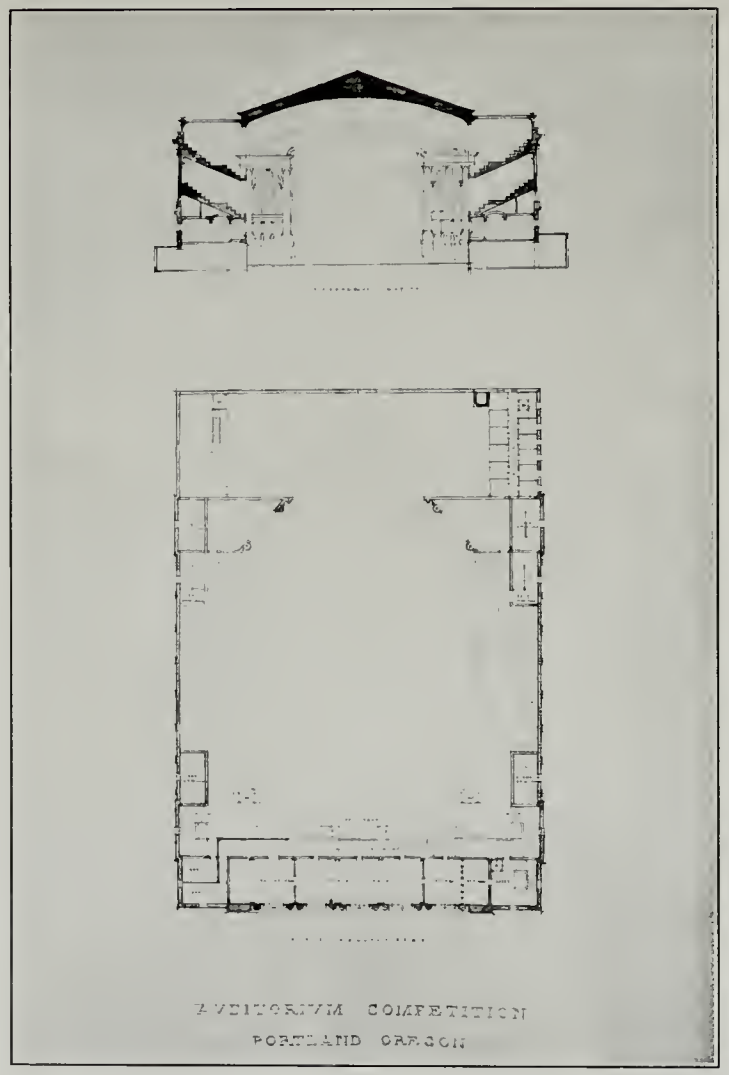
Lazarus and Logan, Architects, Portland



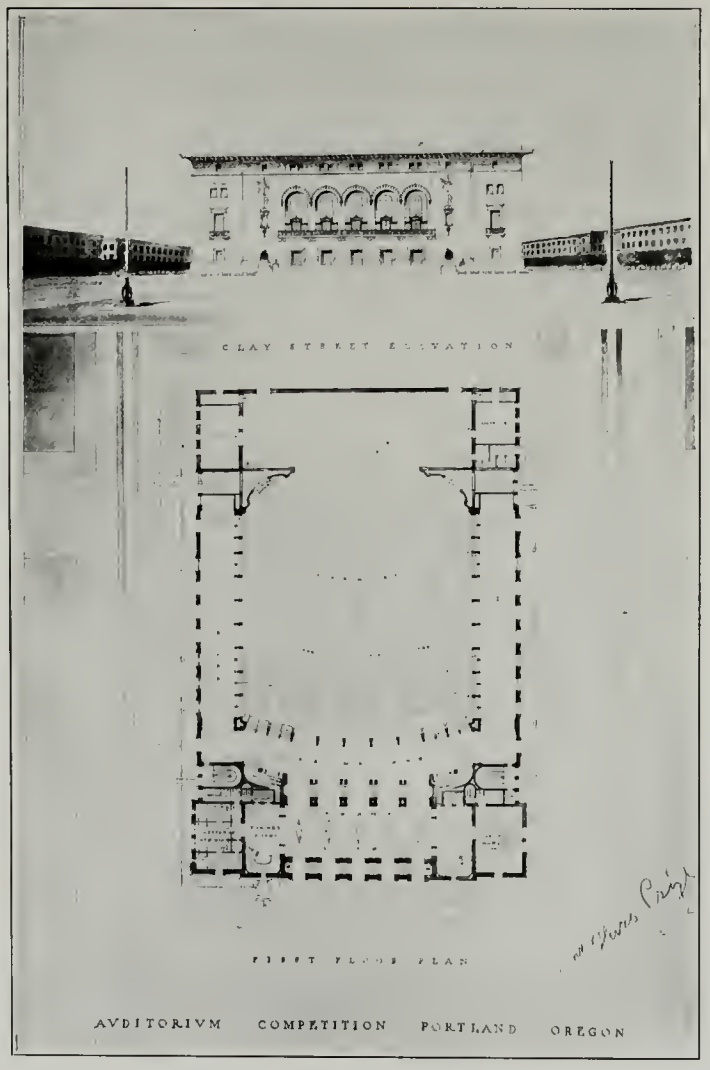


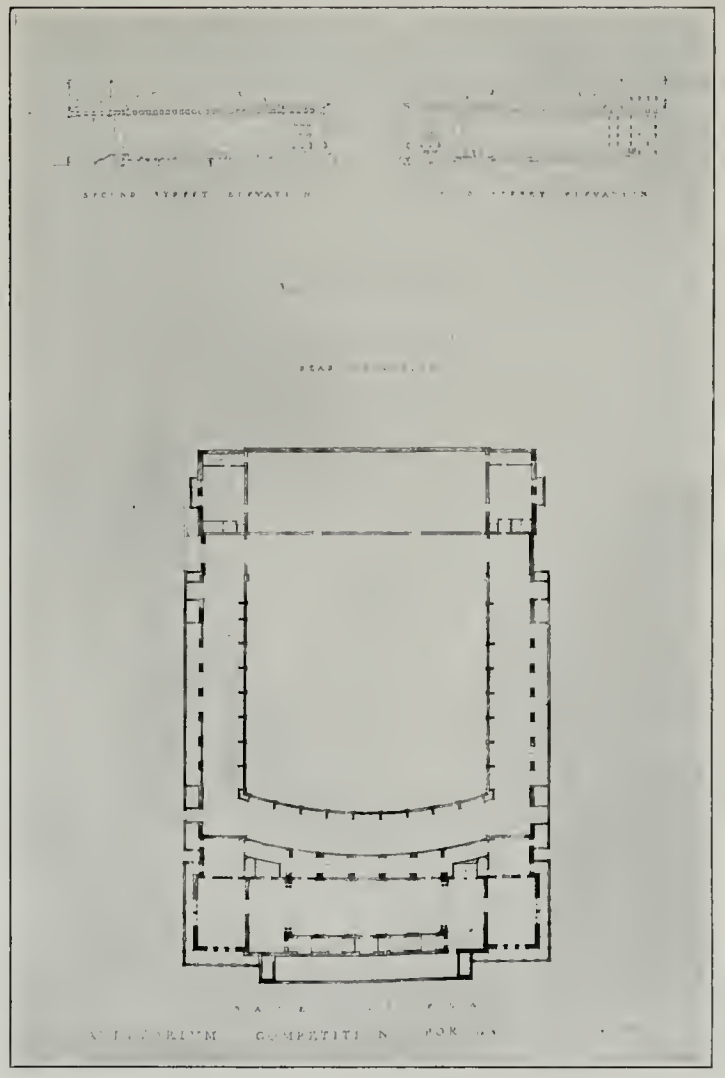
Elevation and Basement Plans, First Third Prize, Portland Auditorium Competition

Russell, Gelstrap and Riley, Architects, Portland

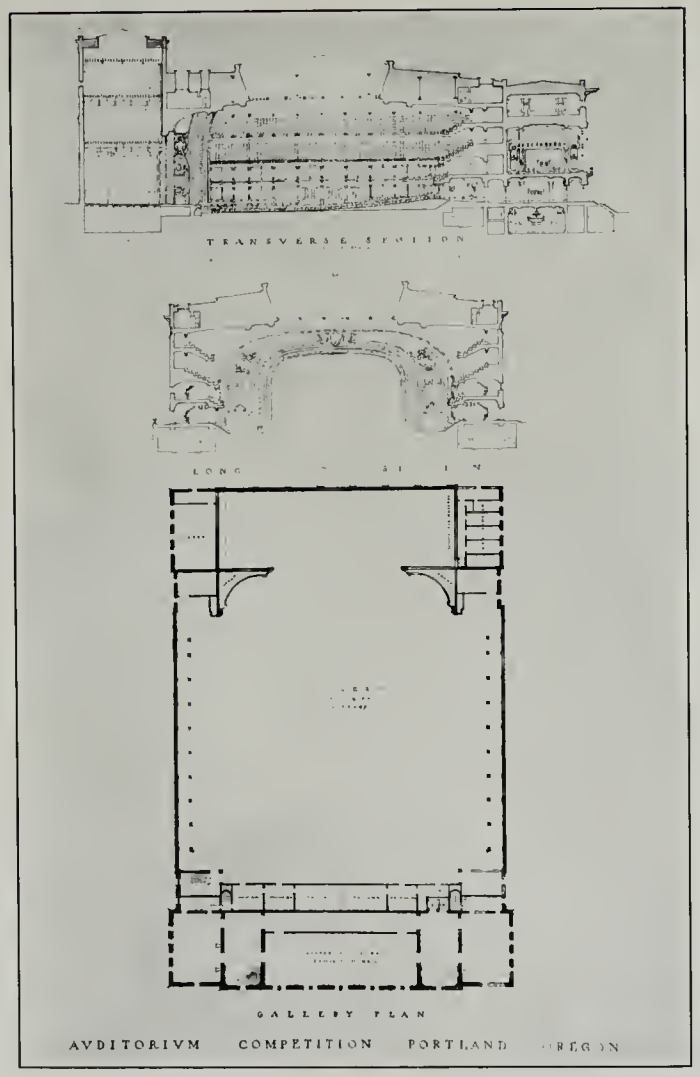


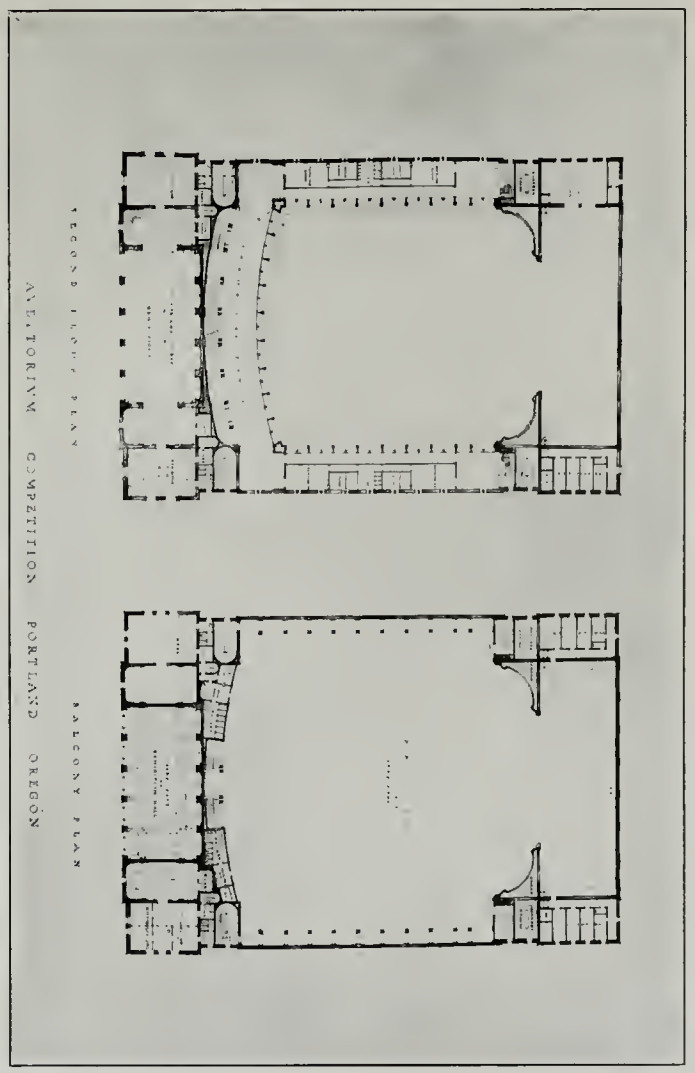
First and Second Gallery Plans, First Third Prize, Portland Auditorium Competition
Russell, Gelstrap and Riley, Architects, Portland



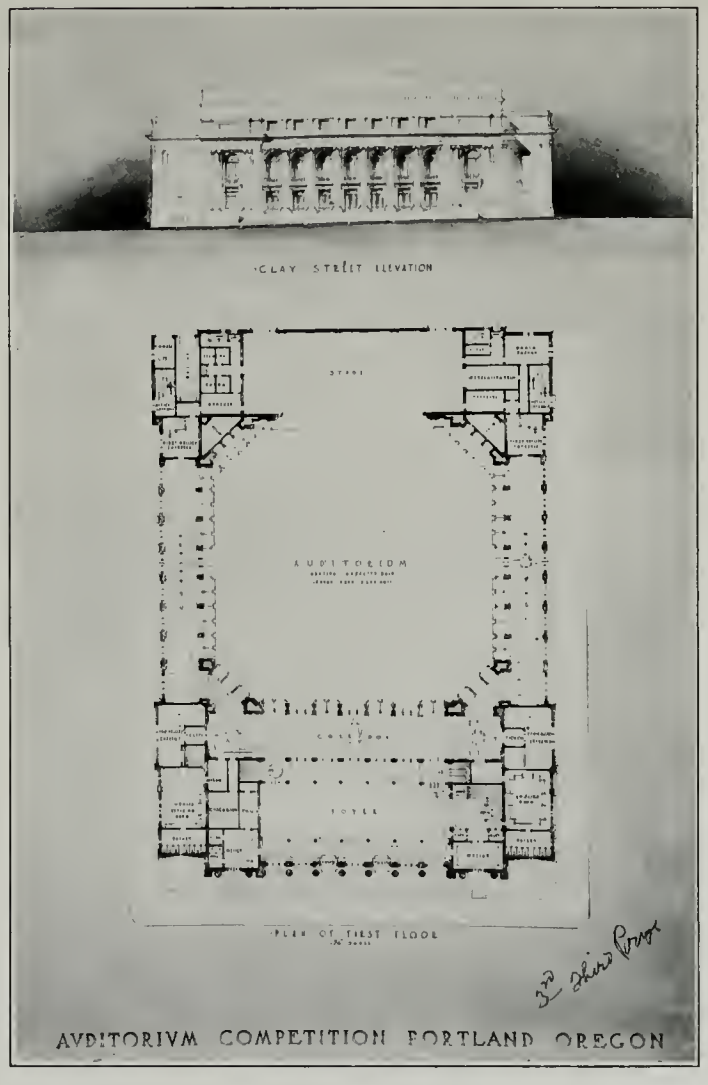


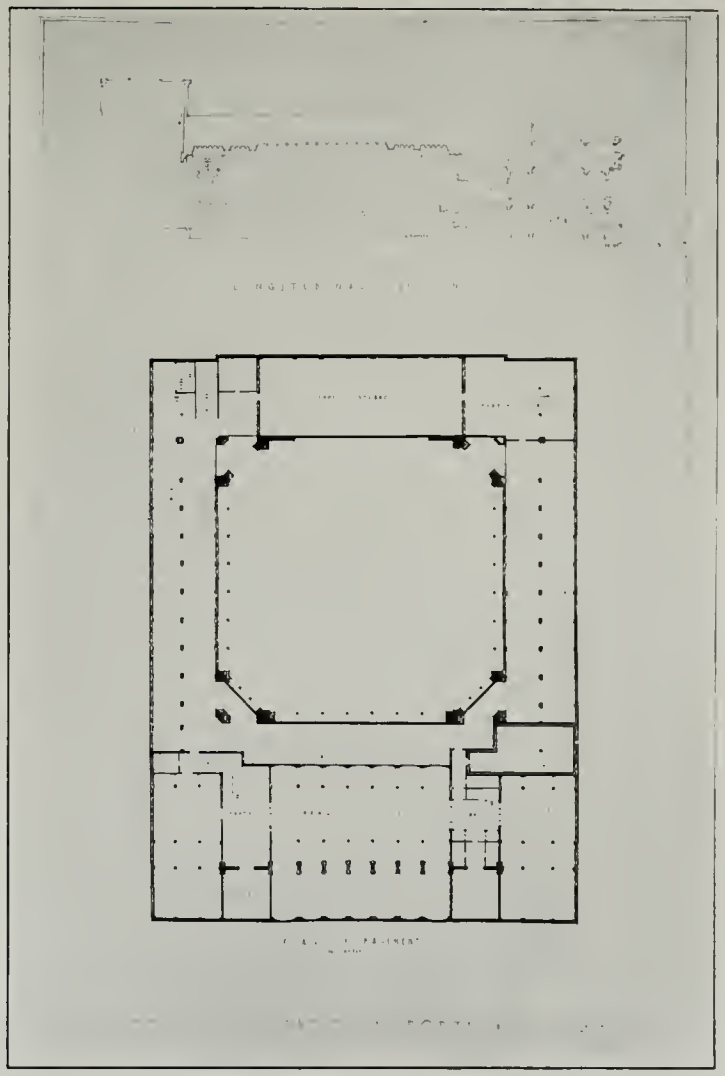
Elevation and Basement Plans, Second Third Prize, Portland Auditorium Competition
Mr. J Milton Dyer, Architect, Cleveland, Ohio





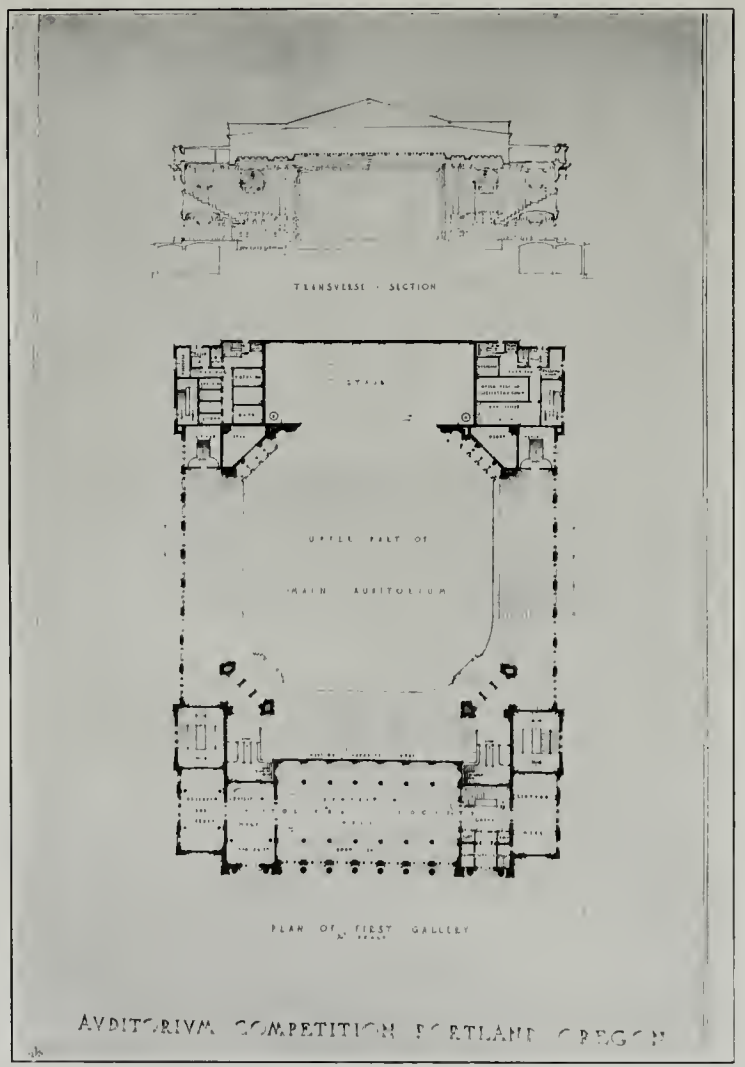
First and Second Gallery Plans, Second Third Prize, Portland Auditorium Competition
Mr. J. Milton Dyer, Architect, Cleveland, Ohio

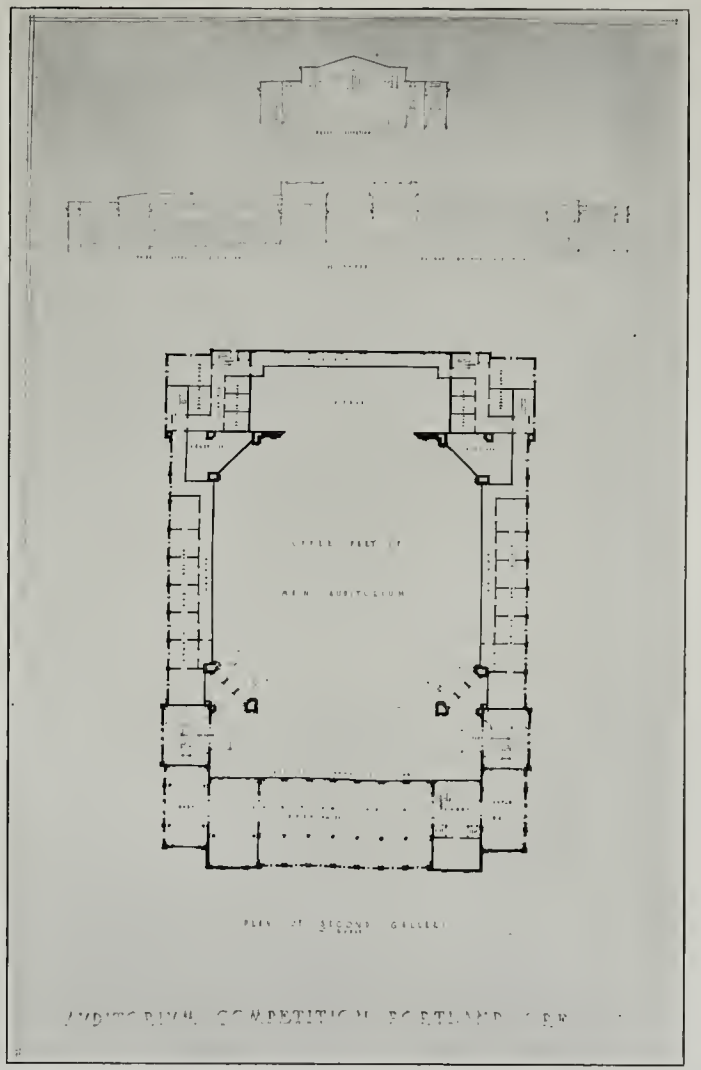




Elevation and Basement Plans, Third Third Prize, Portland Auditorium Competition
Mr. John Graham, Architect, Seattle, Wash.

PACIFIC COAST ARCHITECT
NOVEMBER, 1911





First and Second Gallery Plans, Third Third Prize, Portland Auditorium Competition
Mr. John Graham. Architect, Seattle, Wash.

PACIFIC COAST ARCHITECT
NOVEMBER, 1911

Icing of Foods Art—Housewife Faces Vexing Problem in Cutting Down Item of Expense—Strides in Refrigeration

By Clifton J. Wood.

Perhaps no business has progressed in development with such rapidity and perfection as that of refrigeration. The house wife of the modern home most readily appreciates the vast difference in the refrigerators of today and those which were manufactured a decade ago.

Manufacturers naturally have striven for a perfect, hygienic, food-preserving refrigerator with the least possible ice consumption. The old pine box of a few years ago has been transformed by the many improvements into an article of beauty and real service, and the health and comfort of the family need no longer be impaired by poor refrigeration.

Before buying a refrigerator the place to locate it should be definitely decided. It should not be in the kitchen or near the heat of the range or exposed to the sun, yet should occupy a position conveniently accessible to the household and iceman. Owners often do not observe these points, and as a result the maker of refrigerators is blamed for the poor quality purchased, which really is entirely the negligence of the owner or because of being uninformed on the requisite care of refrigerators.

For the average home, ice refrigerators should be adopted, because they give the service, preserve the food and are considerably cheaper.

In refrigerator manufacture experience has proven the important features to consider are insulation, circulation, lining, sanitation, preserving qualities and ice consumption, in their respective orders, and, lastly cost, or rather, the qualities and price together.

There are numerous materials for insulating. A dead air space properly constructed and lined has proven a superior insulation to cork, mineral wool, felt, etc., particularly for home and hotel size refrigerators, where vegetables, fruits and meats are never required to be kept at temperatures lower than 36 or 38 degrees and varying to about 44 degrees. Mineral wool and other materials for eight to sixteen-inch packing house walls to carry zero temperatures are in such cases adapted to those requirements.

The interior arrangement of a refrigerator should be so a continuous dry circulation will take place, the cold air descending down on one side and arising on the other, which then, as it reaches the ice again, passes through it, the ice purifying the air and carrying off into the drain pipes the impurities collected in its ascent. Side refrigeration is the most sanitary and produces greater cooling power in bottom of box.

The air ascending through open-mesh wire shelving, which does not obstruct, gives the food department the best possible benefits, because, instead of the cold air driving the impurities down into the bottom and back up again through the foods, as in overhead iced refrigerators, side refrigeration keeps the air in a continuous oval-shaped course. Each time it passes through the foods it must necessarily be purified by passing again through the ice.

The lining is of importance. Opal glass and tile lining ranks in first place. They are milky white, smooth and clean, and are most desirable.

There are two other items that should not be overlooked. The metals used in the ice chamber, shelving and door trims, if noncorrosive, will not affect the contents of the storage compartment. Beware of metals that will taint the foods. Some are very poisonous. The foremost manufacturers use the best quality of heavy galvanized iron for the ice chamber and ice rack, while woven steel-mesh wire shelves, removable, no less than quadruple plated, are undoubtedly the best.

The other metal trims around doors, etc., and on inside should be of German silver, which presents an added appearance of beauty, and is sanitary, noncorrosive and is easily cleaned. A refrigerator of oak or tile exterior will stand the best wear.

Hardware should be nickeled, of heavy design and latch so constructed that the doors may be tightly drawn in place. Such latches have lever handles which automatically catch by simply pushing the door closed, but have the additional feature of forcing the door tightly closed by shoving the handle farther down and toward the refrigerator stile.

Ice and storage compartment doors so equipped and with strong hinges to correspond prevent doors sagging. For if they are not so fitted, the cold air seeps through the cracks and wastes ice. It therefore behooves an owner of a refrigerator to keep all doors shut in best possible manner.

To get the best results from a refrigerator, it should be placed where it is dry and away from heat. It should also be kept filled to its fullest capacity with ice. Don't impede progress of cold air circulation with cloths, newspapers and the like. They may save the ice, but they interfere with its proper operation. After purchasing a refrigerator, see that it is frequently cleaned, as well as the drain pipe, trap and ice rack.

Los Angeles Building Code

Even so prosaic a subject as a building code may have some element of humor.

It appears that one of the conditions attending the passing of a building code by the Council of Los Angeles, Cal., was that it should not become effective until thirty days after its adoption. Before the expiration of that period the City Council added some new features at a supplementary meeting, and later made a further change. As each change necessitates a thirty-day period before the code can become operative, local architects are asking the Council to refrain from further amendments in order that the code as originally passed may become a law. As it is now, the code is so indefinite that building is unnecessarily retarded and every day makes more uncertain when the code will rest as a completed guide to building practice.

New Fire Extinguisher

A successful demonstration of a new fire extinguisher was given in a London suburb during September, after having attracted considerable attention in France, where the inventor was decorated by the French government. Two cylinders are used, one of which is small and charged with "ignifuge" gases, which by connecting tubes are used to expel the solution from a much larger cylinder through an ordinary nozzle. The compound is described as follows:

(1) A mixture of ignifuge gases, which as a physical agent utilizes its elastic force to project a liquid impregnated with salts and as a chemical agent render the gases of the atmosphere which burn in every fire incombustible. (2) An effervescent liquid, in which are found salts in a state of solution. These salts, unknown before, were obtained by the Abbe D. Daney through electric furnaces of 3000 to 5000 amperes. When projected they produce other extinguishing gases which increase the effect of the ignifuge gases alluded to above. When reaching the blazing material they cover it with a peculiar dust-like coat, which makes it fire-proof.

Spokane Building Code

After six months of labor the Spokane Building Code Commission has completed its work and submitted to the city commissioners for approval a code which embraces many changes, and which, if adopted, will make the building restrictions in Spokane as up-to-date as any in the country.

One of the most important changes provided for in the new code is allowing an increase in the size of buildings, which will permit buildings twice as large as any now in existence to be constructed. A change is also proposed in the matter of fixing fees for building permits, the law hereafter providing for a payment of 12½ cents for each 100 feet of floor area, with a minimum charge of 50 cents. This would make no material difference from the charges in effect at present, the charge being based on the valuation of a building. Other important recommendations of the commision are as follows:

More rigid inspection of passenger elevators and providing for inspection of freight elevators, which has never been done.

More strict provision regarding use of gasoline in all buildings.

Providing for inspection of false work and elevators used for construction of buildings to insure protection of employes.

Compelling new regulations for the protection of the public during construction of buildings.

Providing for ventilation of stages in theatres and moving picture shows, as well as proper ventilation of rest of building.

Special inspection of reinforced concrete buildings, providing for a city inspector during process of the work.

Prohibit garages over one-story unless fire-proof, and all buildings where first floor is used as a garage must be fire-proof.

The members of the Building Code Commission are: George Mackie, City Building Inspector; W. R. Roy, president of the Spokane Builders' Exchange; George H. Keith and R. C. Sweatt, architects, and Charles P. Brant, contractor.

Trouble Among Cement Manufacturers

The Alpha Portland Cement Company has filed a brief before the Interstate Commerce Commission, charging the United States Steel Corporation with attempting to wreck the independent cement manufacturers and to monopolize the business through domination of the Baltimore & Ohio Railroad and its power to fix rates and exact rebates from the carrier.

The Alpha Company advises the commission that the Universal Portland Cement Company, the cement subsidiary of the Steel Trust, went into business with the avowed purpose of driving out all competition in certain parts of the country, and that officers of the corporation admitted that such was the intention.

The commission is asked to decide whether the corporation shall be allowed to exert its influence over the railroads to annihilate the independent industries or whether all concerns shall be guaranteed the same rates in putting their products on the markets.

Wisconsin Chapter Elects Officers

The Wisconsin Chapter, A. I. A., Milwaukee, Wis., has elected the following officers: William H. Schuchardt, president; Armand D. Koch, vice-president; H. J. Rotier, secretary-treasurer.

Washington, D. C., Architects Advocate a Tax on Bay Windows

At a recent meeting of Washington, D. C., Chapter, A. I. A., a committee of three was appointed to consider the adivsability of amending the building regulations and placing a tax upon bay windows.

In a communication to the Commissioners of the District of Columbia, by a leading architect of Washington, it was contended that the unfortunate attempt of owners to secure picturesqueness in the construction of bay windows, which in most cases project over the building line, had done much to mar the beauty of streets.

The Commissioner replied that he desired before making any recommendation as to amending the building regulations to have from the architects as a body their views on the subject, and it was pursuant to this request that the committee as above stated was appointed. The report will be awaited with interest.

A Monument to Mark Twain

The Mark Twain Monument Commission, named by Governor Hadley, of Missouri, to select a site and erect a monument in memory of Mark Twain, has chosen a site in Riverview Park, Hannibal, Mo., at a point overlooking the Mississippi River.

Panama-Pacific Exposition to have Tallest Structure in the World

If present plans are carried to a successful completion, a memorial tower, designed by Mr. Willis Polk, for erection at the Panama-Pacific Exposition, will be the tallest structure in the world.

We learn from press dispatches that it is proposed to build this tower to a height of 850 feet and that it will have a base 232 feet square.

Reinforced Concrete Laid Without Forms

An architectural engineer, Thomas Fellows, of Los Angeles, has been pioneering in reinforced concrete construction, with the result that he has succeeded in building a two-story house without the use of wooden forms to hold the concrete.

The frame work, composed of mesh wire, steel and trussit metal, is strung up and then the concrete is poured in layers between wiring. The placing of the wire is so gauged that the concrete oozes through the mesh to just the right degree. An idea may be gained by watching a plasterer put his plaster over wooden lathes, noting the distance the plaster proceeds to the rear. Mr. Fellows maintains that concrete can be gauged in the same degree.

According to the originator of the method a saving of fully 30 per cent is made in doing away with the forms, while the cost of the interior plastering is reduced by fully 40 per cent. It is claimed by Mr. Fellows that none of the usual ornamental effects that are possible with the wooden form method of treating concrete are lost by using his method.

Further tests are soon to be made by Mr. Fellows in order to ascertain if it can be adapted to the heaviest class of concrete construction.

The Pacific Coast Architect

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VOLUME 2 DECEMBER, 1911 NUMBER 3

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The Pacific Coast Architect

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The Editor will be pleased to consider contributions of interest to the readers of this publication. When payment for same is desired this fact should be stated. Self addressed envelopes must accompany all such contributions.

ADVERTISING RATES ON APPLICATION TELEPHONE MARSHALL 236

Current Comment

Of course you will have a Merry Christmas.

May you have a prosperous New Year.

The price you ask and the price you get are not always synonymous, by a long shot.

Inflated land values have proven the stumbling block in the growth of many cities.

Why is it the desire for a certain piece of land by a municipality for public improvement is the signal for its value, in the minds of the owners, to leap in one wild bound? Can you tell us?

The city needs an Auditorium. The commission appointed by the mayor has chosen a plan. The old exhibition site was desired, but it would appear that values have taken a most unusual climb. The market site is impossible from the point of location. If it is felt that the exhibition site is the most logical one, there is a method by which this property can be obtained at a reasonable valuation.

Advices from Frisco indicate that a corporation of moneyed men will shortly place on the market "canned gas" that can be purchased in any quantity desired from your corner grocer. What a boon this will prove to we poor unfortunates who, when we have a legitimate "kick" on the antics of our gas meters, receive nothing better than the insolence of the underlings and straw officers in charge of our local gas combine. Hasten the day before we are forced to pay a fine for changing the map carried by some of these cheap hirelings.

Oregon Chapter Elect Officers

At the annual meeting of the Oregon Chapter of the American Institute of Architects, held at the Commercial Club, the following officers were chosen to serve for one year: President, Ellis F. Lawrence; vice-president, Ion Lewis; secretary and treasurer, Frank Logan, and Edgar M. Lazarus and Harrison C. Whitney, trustees.

Preceding the election of officers the chapter held a banquet, largely attended by the members, given in honor of the exhibitions of the local organization as a chapter in a national body.

The following resolution was adopted: "Be it resolved, that the Oregon State Chapter of the American Institute of Architects herewith expresses its approval of the conduct of the recent Portland Public Auditorium Competition"

Architecture at the O. A. C.

On another page we present a short article from Assistant Professor R. H. Dobell, of the department of art and architecture, telling of what it is hoped to accomplish by this department. Of course, as is pointed out by the writer, the work is carried on under a handicap, but there is no handicap great enough to retard the progress of a student who is determined to learn and work accordingly.

While it is granted that other schools may have the advantage of location, Corvallis is close enough to Portland so that "monumental work may be seen and studied." We are able to show the same examples of construction that may be found in any city on the coast. Oregon architects owe it to their civic pride to do everything in their power to make an unqualified success of the art and architectural department of the Oregon Agricultural College.

Washington State Chapter, A. I. A.

At the annual meeting of the Washington State Chapter, A. I. A., held at Seattle, November 2d, the following officers were elected: President, W. R. B. Wilcox; first vice president, F. H. Heath; second vice president, C. H. Alden; third vice president, K. K. Cutter; secretary, C. H. Alden; treasurer, A. C. P. Willatzen.

Formal Opening of New Quarters

One of the most pleasing events in the history of the Portland Architectural Club took place Friday night, December 8th, the occasion being a reception given to celebrate the formal opening of their splendid new home on the top floor of the Sweeney building, 214½ Stark street.

Guests numbering several hundred visited the rooms during the evening, the members of the Builders' Exchange coming in in a body under the leadership of Secretary Danforth and E. D. Timms, of Timms-Cress & Company. Mr. Timms is the official "yell-master" of the Exchange and had spent an entire week drilling his men on some new ones to spring on the architects.

The Portland Architectural Club, organized in 1906 for the purpose of bringing together the members of the architectural profession in social and educational relationship, has accomplished benefit far beyond the fondest expectations of its founders. It has started local annual architectural exhibits and scholarship work for architectural students; has instigated legislation beneficial to the profession. It has held public lectures and entertainments and by social intercourse has established a higher sense of professional ethics. Greatest of all, through the envoys of the club, the first Coast architectural convention was held in Portland and the formation of the Architectural League of the Pacific Coast was perfected, which has resulted in an organized circuit of exhibitions and scholarship work. The Portland Architectural Club has made possible, through friendships established in its work, the Oregon Chapter of the American Institute of Architects, which has just received its corporate papers from the state and its charter from the national body of the American Institute of Architects.

The club started with about twenty members and at the present time it has about eighty enrolled. Owing to the rapid growth of the club, larger quarters became necessary and they were extremely fortunate in procuring a lease for two years on the entire top floor of a building in the very heart of the city. Competitive plans for fitting up the new quarters were submitted by local members and those entered by Messrs. William H. Flanigen and William P. Dawson were selected. The various material dealers and contractors of the city generously donated the labor and material necessary for fitting up and furnishing the rooms.

The quarters are commodious and well arranged and provide an abundance of room for both social and educational purposes. The main social room is 26x26 feet in size and fronts on Stark street. It has two large fireplaces with tapestry brick facings and massive wood mantles. It has a cove ceiling of unusual height, which is ornamented with artistic lighting fixtures. The walls have six-foot fir wainscoting with wide built-in seats on three sides of the room.

The drafting room is 36 feet in length and 16 feet wide and is separated from the social hall by sliding doors so thta both rooms can be united, forming one large room. Lockers line the inner walls of the drafting room.

The walls of the room were lined with drawings submitted for the annual exhibition and the public is cordially invited to inspect the same. The rooms will be open from 2 p. m.

As soon as the exhibition closes the atelier will commence its work for the winter.

The officers of the club are: President, H. Goodwin Beckwith; vice president, J. Andre Fouilhoux; secretary, William H. Flanigen; treasurer, William P. Dawson.

The Circle A Club Associates with the Press Club

Through the efforts of some of the members of the Circle A Club it will shortly become affiliated as the art auxiliary of the Press Club.

The meetings will be held twice a week and on Sundays as usual. The club will work in the jinks room of the Press Club in the Elks building.

The Circle A Club was organized in March last year by Val Devereux, Lute Pease and F. A. Routledge, and has had a rapid and interesting growth. The purpose of the club is for newspaper artists, commercial artists and others to meet at specified times and work from models, without an instructor, for the benefit to be derived from observing the work of each other.

A great deal of out-of-town sketching in oils has been a prominent feature, the members having been fortunate enough to secure the criticsms of C. C. McKim, the landscape and marine painter of Portland, Maine, who criticises the work of several classes at the Art School of the Portland Art Association. Henry Wenty, one of the charter members of the club, has been a source of much gain and education to the members working with him.

Among the professionals of the city numbered among the membership of Circle A are Val Devereux, architectual designer; Lute Pease, formerly editor of *The Pacific Monthly*, magazine illustrator and newspaper artist; Fred Routledge, commercial advertising designer; Carl Koch, commercial designer; Wade Blevins, show card writer; C. C. Cosner, show card writer; C. J. Fulton, show card writer; H. C. Sibley, newspaper artist; W. P. Hayes, commercial engraver; Frank Emory, designer of lighting fixtures; J. Juopo, decorator; B. A. Hickman, architectual draftsman; C. C. Keller, art dealer, and L. C. Miles, advertising designer.

With such men as leading spirits a considerable of the real art spirit has been shown by the club members. The best life models have been obtained for working from the costumed figure and the nude.

During the past few weeks an interesting exhibition has been on view in the present studio in the Labbe Building. Life drawings in charcoal, pencil and oils, landscapes in oils, water color sketches from costumed models, quick sketches in many mediums and other examples of work have been shown.

The three previous exhibitions during the short life of the club were made up of the works of A. G. Disi, of San Francisco, who showed a number of decorative designs; a commercial exhibition showing the work of local commercial artists, and an exhibit of landscape and marine paintings by C. C. McKim. Many high class exhibitions will be held under the new arrangement of the club.

Since the organization of the club three of its members have gone on to the art schools of larger cities. They are L. Ricker, who is now in San Francisco Institute of Art (formerly the Hopkins); A. Harris, who has gone to Cleveland, and C. C. Cosner, to the Chicago Art Institute.

The membership is increasing rapidly, and any of the architectual draftsmen who are artistically inclined are eligible to membership.

Clay Manufacturers Form Organization

A number of clay manufacturers met recently at the Oregon Grill for the purpose of forming a state organization of brick and terra cotta manufacturers. The object of the association is to hold an exhibition and clay workers' convention, to be held in Portland the early part of the coming year, and to include the craft in Washington and Idaho, and in fact the entire Northwest. J. K. Moore, of the Western Clay Co., presided at the meeting, and following a discussion of the benefits to be derived from an organization of this kind the following officers were elected: President, G. H. Rogers, Newberg Brick and Tile Co.; James Anderson, secretary. Those present at the initial meeting were C. E. Fuller, C. C. Curry, J. K. Moore, C. C. Smith, G. H. Rogers, James Anderson, and C. S. Ridge of Seattle.

Architectural Work at the O. A. C.

By R. H. DOBELL

Assistant Professor of the Department of Art and Architectural

This summer the art department of the Oregon Agricultural College sent a very modest announcement to the architectural offices of the Northwest, particularly those in Oregon. Courses in architecture were to be established, it read, at the Oregon Agricultural College, and the co-operation of every architect in the Northwest was desired. Let it be supposed that the thinking architect, who takes his profession seriously, gave us a second of his time, which no doubt he would, and did us the favor to ask these questions—mentally you understand, for time is money, and nobody works for the sake of his profession. Nevertheless it may be taken for granted, doubt not, that the thinking architect asked himself abstractedly: Will this work be efficient, and how many more half-baked architects will they turn out? It is perfectly right that these questions should be asked. We are exceedingly grateful to the one man of all who received those announcements who was so justly jealous of and in love with his profession that he came through with a letter and asked these questions.

Having invited ourselves to assume the burden of proof, which is ours anyway, let us examine the existing conditions which seemed to demand the establishment of architectural courses in the college, and which go to shape the methods of carrying on such work. California has been heretofore the nearest source of instruction, the University of Illinois next. The average college student is limited in his finances, all popular impressions and evidences to the contrary. The Agricultural College is peculiarly a school for the people. The profession of architecture appeals to many, but they can not afford to go to the Eastern schools. There is no question that there is a demand and place for architectural instruction—instruction that is worth while—in the Northwest.

There are two conditions existing that preclude any attempt in the first years of this work to follow lines of instruction practiced by other schools. The first of these conditions is the unfortunate location of the school, removed as it is from a city where building operations are at all times being carried on, and where monumental work may be seen and studied. This can be overcome in future years by requiring a year's office practice in a large city on the part of the student. This at present is not feasible. The second condition encountered is caused by the undeveloped conditions of secondary schools in many places throughout the country, so that large numbers of students come to college without sufficient preparation, which naturally handicaps them greatly. This condition will also disappear as the educational system of the state develops. It is a gigantic task, it would seem, to attempt to give work that must be treated as a fine art, and attempt to embody in it all the aesthetic training, the cultivation of feeling and the broad cultural training for appreciation of the essentials of all fine arts, with drawbacks such as these with which to contend.

For the present we cannot give a degree course, nor would we attempt it if we could. We can, however, do this for our students. We can inspire in them, we hope, a desire to continue their work to a degree in some school of known reputation. We can insist on their keeping in their course such cultural studies as English, public speaking, modern language, etc., of which even the best of our architectural schools are neglectful. And we can offer for the present two years of architecture that will keep them busy and give them a good foundation for more advanced work. And this, then, for the present is our task, to try to equip our students with the technique of drafting that they may take up more advanced work elsewhere and there give a proper attention to the essentials of architecture.

Portland Leads Entire Country in Construction

With a strong lead in every commercial and industrial line over the first eleven months of 1910, Portland enters the last month of this year with every prospect of eclipsing the 1911 records of every city anywhere near its size in the country.

November's records were little short of phenomenal, substantial gains being made in every line with the exception of postal receipts, which fell slightly behind the total of the same month one year ago. In new construction Portland leads the entire country with a gain of 82.5 per cent, the total volume of permits issued for the month reaching the handsome sum of $2,010,785, as compared with $1,119,205 for November, 1910. In this respect every other city on the Pacific Coast was left far in the rear, Portland's total falling short by less than $200,000 of the combined building permits of Los Angeles, Seattle, Spokane and Tacoma.

During the month there were 561 permits issued, and during the same month one year ago the number was 422. The increase in the actual money invested in new construction for this month over that of November, 1910, was just a little under $1,000,000.

May Pass 1910 Figures

The indications are now that the buiding record of 1911 will at least equal and probably surpass the phenomenal figures of 1910. For the first eleven months of this year the value of the new construction authorized was $17,886,644, while for the same period one year ago the sum was $16,165,782, which is equal to a gain of about 11 per cent. The city building inspector estimates that the value of December's permits will reach $3,000,000, which will bring the total for the year to $20,886,644, compared with $19,886,202 for 1910.

Plans for class A buildings are now on file in the building inspector's office, for which permits will be issued in December, to the value of $2,000,000, while residence construction and smaller durable construction in sight will add at least another $1,000,000 to this sum. Building Inspector Plummer said this morning that 1911 will almost certainly establish a new building record in this city.

WHAT OF THE NEW YEAR?

In the East and Middle West the presidential election year, as well as the one preceding it, are looked upon with fear and trembling. Conservatism is the watchword. Wall street has made it so. As an indication that the West has successfully "divorced" Wall street with its precedents, and no longer considers it a barometer of what business conditions are or ought to be, we are presenting a symposium made up of existing conditions in the building line in Portland.

The questions addressed were: How does business this year compare with 1910? What of the new year? The opinions are from the prominent jobbers and manufacturers of building material in the city.

J. C. Bayer Furnace Co.—Mr. Bayer: Business is considerably better than last year. Look for good business next year.

Brunswick-Balke-Collender Co.—Mr. Grenning: Much better than 1910. I think there will be a shrinkage next year.

P. L. Cherry Co.—George Cherry: Business ahead of last year. Things look very good, indeed, for the coming year.

Henry Cowell Lime and Cement Co.—Mr. Nickerson: Away ahead of 1910, and looks better for 1912.

F. T. Crowe & Co.—Mr. Farrington: Very good in 1911 and think the coming year very good along building lines, but the prospects for paving are not so bright.

Concrete Steel Products Co.—Mr. Persons: Fine. Prospects for 1912 strong, apparently 50 per cent better than last year at this time.

Columbia Elevator Co.—This is our first year in business but we are more than satisfied.

Columbia Contract Co.—Mr. Brout: This is our first year and business has been very satisfactory. Things look bright for 1912.

The Carmichael Co.—Mr. Golden: If business is as good next year as it has been this month, we will be more than satisfied.

W. P. Fuller & Co.—Mr. Fayles: The volume of business in the city was much larger than last year. Looks fine, fine for 1912.

Gunther-King Co.—Mr. King: Ahead of last year. The new year looks good to us.

Holmes Disappearing Bed Co.—Mr. Cooke: Fifty per cent ahead of last year. Looks exceptionally bright for 1912.

Harris Ice Machine Works—Mr. Harris: Running about the same as last year; 1912 looks good.

M. L. Kline—Mr. Kline: Very good, but no prices at all. I think you will find that where the volume has been greater the prices have been demoralized. Things look bright for next year.

Lithic Mfg. Co.—Mr. Schiffer: Business away above last year. Things look very bright for 1912.

Morrison Electric Co.—Mr. Jagger: Business more than one-third above last year In 1912 we will do twice as much as this year.

The W. G. McPherson Co.—Mr. McPherson: Twenty per cent less than last year and business will be very quiet next year.

Nitschke & Andrae—Mr. Andrae: Not quite as good as last year. We are very busy and next year looks good.

Newcomb Engineering Co.—Mr. Newcomb: Business good in the year just closing and expect to at least double our business for the coming year.

Newberg Brick and Tile Co.—Mr. Rogers: Business was good because we hustled for it; 1912 will be a banner year. Watch for the "ruffles."

Oregon Brass Works—Mr. Pryor: More than double last year. Looks fine for 1912.

Oregon Hardware Co.—Mr. Jennings: Business away ahead of last year. While there seems to be a conservative sentiment for the coming year, we believe that building will be up to the average, if not better. The moneyed men are going right ahead with their building.

Oregon Art Tile Co.—Mr. Schofner: Business about the same as last year. From present indications 1912 looks like a big year.

Olson & Co.—Mr. Olson: Business 50 per cent better than 1910. General outlook for 1912 good.

Portland Concealed Bed Co.—Mr. Snidow: A whole lot better than last year. Next year will be better still.

Portland Hardwood Floor Co.—Mr. De Lano: Fine; three times ahead of last year. Looks good for the coming year.

Pacific Lumber and Mfg. Co.—Mr. Stetson: Business has been good this year and shows a considerable increase over last year. Things look bright for 1912.

Portland Wire and Iron Works—Mr. Comstock: More business than last year. Things look bright for 1912.

Portland Cement Laundry Tray Co.—Mr. Dondero: Better than last year by 20 per cent. Looks good for next year.

Portland Sheet Metal Works—Mrs. Whitmer: Business has been splendid. We have had all we could do. We are going to do more next year.

Portland Tile and Mantel Co.—Mr. Wright: Business might be better; might be worse. Things look fairly good for next year.

Pacific Iron Works—Mr. Heintz: Good up to last month. Think we are going to have a good year next year.

Parelius Mfg. Co.—Mr. Parelius: A little bit ahead of last year. Looks as though it ought to be pretty good next year.

Portland Sand Co.—Mr. Brownrig: Ahead of last year. Looks good for 1912.

Sullivan Tile Co.—Mr. Sullivan: While we have not been in Portland very long, business has been beyond our expectations. The outlook for 1912 is exceptionally bright.

Shope Concrete Products Co.—Mr. Shope: Entirely satisfactory; best in the world for 1912.

Spady Mfg. Co.—Mr. Spady: Fairly satisfactory; will be much better next year.

Timms, Cress & Co.—Mr. Timms: The volume of business is up to last year, but it seems to take more effort to get it. The general talk is discouraging but the actual facts and developments are encouraging.

Trussed Concrete Steel Co.—Mr. Curry: Away ahead of last year. Fine for next year.

Washington Brick, Lime and Sewer Pipe Co.—Mr. Hollister: Business exceptionally good. In spite of the presidential year I believe the volume will be greater than the year just closing.

Western Building Material Co.—Mr. Jones: The business for 1911 was 25 per cent greater than the previous year. Expect to make the same relative increase the coming year.

Western Clay Co.—C. C. Smith: We had a good business this year but I think the coming one will be a good deal better.

Western Refining Co.—Mr. Ayres: Very satisfactory. Things look good for next year; expect to double our business.

Fred W. Wagner—Mr. Gentery: Away ahead of last year. Good for 1912.

Warren Construction Co.—Mr. Lynch: Better by two to one. Looks very good for 1912.

J. C. English Co.—Business has increased practically 50 per cent in the past year.

The Big Question of Wall Decoration

By CLYDE E. HORTON

No matter what part of the building specification may be under consideration, the architect invariably finds himself face to face with a great array of materials all clamoring for his attention and all claiming to be the very best for the purpose. First the general class has to be decided upon, and then, usually more difficult still, comes the vast number of different styles in each class. Just as one example, if brick is selected for exterior wall, "What kind?" is the next question, and sometimes this selection of style after the class has been chosen is an extremely difficult matter. Few home builders realize the sort of encyclopedia an architect must make of himself before he is equipped to practice his profession. In the matter of wall decorations there are first a number of classes, all having more or less merits, which should be considered in a general way.

There are, first, paper coverings; second, fabric coverings, and third, painted or similar decorations. It is hardly necessary to dwell to any extent on the subject of paper coverings except to state that under this classification such coverings as grass cloth and Jap gold cloth should be included. In the class of fabric coverings we have a range of materials running from the comparatively inexpensive fabrics, such as burlaps, denims, etc., up to silks, tapestries, damask and other such costly fabrics. These covering materials of course lend themselves to every requirement of wall decoration from the standpoint of color. They range from the very coarse weave to the finest texture possible, and at the same time cover all period styles and color effects, which are as a rule well known.

The third class, paint and similar decoration, is a style of wall finishing the possibilities of which are not as generally appreciated. When the term painted or decorated wall is used it usually brings to mind the glossy walls of the old-time kitchen, while to those who are more familiar with the possibilities of paints and their kindred materials, when used on walls and ceilings, appreciate at once the decorative as well as the sanitary qualities of such a finish. There is no question but that the washable painted finish is the most sanitary finish which can be generally used for walls and ceilings, and as the new decorative qualities of this finish become better known its use will undoubtedly be greatly extended. There are two kinds of painted finishes which should be mentioned especially, the flat oil paint and the flat glaze treatment. Both of these finishes give the architect everything which could be desired in sanitary qualities, both being capable of soap and water washing, providing of course that good quality materials are specified and properly used. Thus all cheap oil paints as well as water paints are eliminated.

First, let us take up the flat oil paint. Here we have a finish which can be applied to practically every kind of wall and ceiling surface, rough or smooth plaster, burlap, canvas, metal or plaster board. It produces a soft, velvety effect which is obtainable in a variety of colors, can be decorated by hand or treated by means of stencils, and thus lends itself to such special handling as may be and often is required. This finish is especially attractive when used on rough plaster. Such a surface seems to bring out the artistic qualities of oil paint, producing great depth of color with its shadows and high lights. One very important consideration in specifying a finish of this kind on any of the above mentioned surfaces is the foundation coat. Unless this part of the work is carried out properly, all the care taken in the final coats will be of no avail. Another consideration is the condition of the wall itself. The surface should be thoroughly dry and free from future moisture, because the best flat paint on earth will not hold up against such odds. It is further important that good quality of plaster materials be used.

Most paint troubles can be traced directly to conditions in the plaster, and further back to moisture in the plaster. Little or no difficulty develops in frame buildings, where the moisture can escape in both directions, but this cannot be said of large office buildings where the walls themselves, in addition to the plaster, may be full of moisture. It is often said that alkali causes the trouble, but the truth of the matter is that it is the moisture in the alkali. But getting back to the foundation coats, there are several different methods of effectually sealing the pores of the plaster. In some cases this result is accomplished by means of a glue size, followed with a flat paint having a fair proportion of oil in it. Then again a varnish size may be used, making a less amount of oil necessary in the succeeding coat However, this process in settling down to one or the other of two methods which are simple and which cover the requirements of average work.

The first of these methods consists of a first coat of white lead mixed half and half with a good varnish size. A small amount of oil may be added. This surface, when thoroughly dry, is followed with two coats of the flat paint, allowing sufficient time between coats for thorough drying. This operation produces a thoroughly sanitary surface which is subdued and rich in its flatness. The second method is even more simple. The first coat consists of flat oil paint and a mixing size, equal parts, followed with two coats of flat oil paint as it comes from the can.

It is the flat tone glaze finish, however, with which the average home builder is not very familiar. Even though this finish is one which has been utilized in different forms for some time, it is only within the last few years that it has been standardized by large paint and varnish manufacturers and brought within the reach of the average builder. The fact that its early use was in large public buildings where exacting qualities were demanded, predicts an increased use in residential work in the future. In producing these glaze effects it is first necessary to build up a suitable flat tone foundation, getting a surface which is flat but not too porous.

After the groundwork has been applied the glaze effect is produced by means of one coat of a glazing liquid which has been previously tinted to the desired shade with glaze colors. These colors come in paste form, and must be reduced and thoroughly mixed with glazing liquid until they are the proper consistency for applying to the wall. The accompanying illustrations show an exact method of mixing these colors with the glazing liquid. After the mixing has been thoroughly done, one coat can then be roughly applied with a good sized wall brush and blended or mottled by stippling. To secure a lighter shade of the same tone near the top of the wall use more glazing liquid in the mixture. For a mottled effect it is necessary to use two mixtures and apply them to the wall with different brushes. These colors are roughly applied in spots as shown in the accompanying photograph, and are then blended together by stippling

with a brush or by means of a cheese cloth or cotton rag. As these materials do not set quickly they can be roughly applied over a large surface of wall and stippled or blended within 20 minutes after application.

It is very apparent from the nature of this material that its greatest advantage to the architect lies in the fact that it can be manipulated to conform to the conditions governing the work in hand. If the rooms are dark it can be lightened accordingly, and vice versa. Furthermore, it permits of blended effects from light at the top of the wall to dark at the chair rail and baseboard. It can also be regulated as the work progresses. The proper architectural specifications for this finish would be as follows: First coat, flat paint and mixing size, equal parts, second coat, flat paint as it comes from the can; third coat, glazing liquid tinted to desired color with glaze colors.

The term "glaze" is a misnomer. Ordinarily it means gloss, but technically it means an application of finishing material having transparent qualities and giving depth and richness of color with or without gloss. The glaze wall should have a mott finish and be capable of soap and water washing or it is not satisfactory. In deciding this important question of wall decoration the subject of redecorating should be considered in addition to sanitation and durability. The flat painted or the glazed wall is ready for redecorating at any time and, as in the case of kalsomine or wall paper, the old material does not require removing. The architect who advocates plain walls where pictures are to be hung, confining the decorative features to the upper parts of the walls and to curtains, portieres and other such articles, will find a most able ally in these comparatively new wall finishes.

Aggies Found New Club—Architectural Society Elects Portland Man President

Oregon Agricultural College, Corvallis.—The Architectural Club of the Oregon Architectural College was founded at a meeting held recently. The following officers were elected for the coming year: Prof. Roy H. Dobel, head of the architectural department, patron; Harry Smith, of Portland, president; Carl Hersey, of Portland, vice president; Clair Martin, of Corvallis, secretary and treasurer; H. Miller, of Portland, correspondent; Messrs. Streble, Johnson and Bristol, program committee; Maller, Marshall and Heckert, constitution committee.

The club was founded to promote the social and instructive advantages of the students in the architectural courses at the college. There will be talks by both faculty members and students, and it is expected that prominent practicing architects of Portland and elsewhere will give talks on the various phases of architecture and construction work. It is planned to conduct a competition later on in the year and also to establish an atelier.

Duluth (Minn.) Architectural Club

With a membership which embraces the architects and draftsmen of the city and which also includes, as associate members, those in Duluth who are closely affiliated with the building trades, the Duluth Architectural Club, which has been recently organized, is looking forward to the winter as a season of unusual activity.

The officers of the club are: Clyde Kelley, persident; E. C. Gillinson, vice president; Edward P. Shurick, secretary; William J. Sullivan, treasurer. The board of directors consists of the officers and the following: J. M. Carson, Vernon J. Price and E. H. Berg.

Personal Mention

Charles A. Reed, of the firm of Reed & Stem, architects, died at his home on Riverside drive, New York, on the 13th of November. Mr. Reed was a graduate of the Massachusetts Institute of Technology, and in association with his partner, Mr. C. A. Stem, practiced his profession in New York during recent years.

Architect Charles W. Ertz has moved from 310 Lumber Exchange Building to 510 and 511 Northwest Building.

T. K. Nickerson, of the Washington Portland Cement Co., was a recent visitor at the plant of the company at Cement, Wash.

R. A. Eldridge, formerly manager of the Western Refining Co., is in Vancouver, B. C., on business.

Architect E. A. Wager, formerly located in the New York Building, Seattle, has moved his offices to the Lumber Exchange.

Architect H. W. Thompson, representing Architects Gaggin & Gaggin, Syracuse, N. Y., has opened an office in the Pacific Building, Seattle, and will have charge of the 12-story L. C. Smith Building during its construction.

Architects Havens & Toepke, San Francisco, have moved to the Maskey Building, 46 Kearney street, San Francisco.

Architect E. E. McClaran will spend the holidays in a trip to Frisco, Los Angeles, San Diego and the Santa Catalina Islands.

E. E. Goodwin has opened an architectural office at 824 Chamber of Commerce Building.

Walter B. Baer, assistant secretary and treasurer of the Denny Renton Clay and Coal Co., and A. W. Morrison, superintendent of the terra cotta factory of the company, were recent visitors in Portland.

A. H. Cederberg, formerly engineer with the Leonard Construction Co., is reported to have accepted a position with the Markle Construction Co., of Atlanta, Ga.

R. R. Smith, formerly assistant superintendent of the Taylor works of the Denny Renton Clay and Coal Co., of Seattle, has accepted the superintendency of the factory of the Western Clay Co.

The Italian committee was tremendously active in trying to keep the exposition open during November, and purposely delayed the award of prizes in order to cause the various nations in the competition to hold open beyond the announced date to obtain prizes which should have been awarded last June.

The American commissioner pressed the Italian committee to pay the insurance and promised to remain open under certain conditions until November 15 if the very grave problem of insurance was solved. The Italian committee had not paid anything up to October, and thus the American pavilion was closed

Architect Carl F. Gould will represent the Washington State Chapter of the American Institute of Architects at the annual convention of the American Institute to be held at Washington, D. C., December 12th to 15th.

Architects Potter & Merrill, of Tacoma, have dissolved partnership. While they will continue their association on the work now in course of construction, at its completion Mr. Potter will continue the business of the firm under the name of Myron, Prescott & Potter in the former offices of the firm. Mr. Merrill anticipates opening architectural offices in Seattle.

The Seattle Architectural Club recently held an informal meeting at the Olympus Cafe. Invitations were issued to members of the club and friends associated in the building construction.

Trade Notes

The Portland Sand Company has added a five-ton Peerless truck to their equipment.

The Reynolds Company, Inc., 47 First street, has succeeded the E. H. Corbett Company and will handle the Humphrey heaters, gas works machinery, marine and stationary gas engines and Pacific ammonia.

H. C. Ayerst has purchased a half interest in the John F. Wineland Company, 506 Macleay Building. The business will be conducted under the name of the J. F. Wineland Building and Engineering Co.

W. P. Fuller & Company have received the plate glass for the Lipman & Wolfe Building, corner Fifth and Washington streets.

In our last issue we inadvertently stated that the Sound Construction Company, of Seattle, had discontinued its Portland office in the Chamber of Commerce Building. This was an error on our part. The company recently secured the contract for the erection of the new 12-story addition to the Oregon Hotel.

The Western Stovepipe and Sheet Metal Co., 133 Stark street, is equipping the kitchen in the Multnomah Hotel.

Fred W. Wagner, 363 Stark street, is thoroughly remodeling and enlarging his office and display room. When finished he will have one of the finest display rooms in the Northwest. Club rooms and lockers are being installed in the basement for the convenience and pleasure of his employes.

The L. A. Norris Company has received a car of channel iron and one of metal lath to be used in the ceilings and partitions in the new Lincoln High School.

The Henry Cowell Lime and Cement Company have moved from 206 to 507-508 Railway Exchange Building.

The finishing and decorating of the Blaine R. Smith residence, shown in the illustrations this month, are the work of J. G. Mack & Co.

Charles T. Peterson has been appointed receiver for the A. F. Cizek Sheet Metal Works of Tacoma.

Ayerst & De Haven installed the steam heating plant in the St. Clair apartments; heating and plumbing in the Mulkey apartments.

The J. F. Wineland Company has completed the general contract on the Mulkey apartments on Market street.

Skyscraper to House 150 Stores

The old adage—"There is nothing new under the sun"—does not, apparently, apply to Chicago, since the announcement has been made that a syndicate of capitalists there is building a 19-story building which will house 150 different mercantile establishments, something which has never been tried before in any other American city.

This multi-store building, which is being pushed skyward at State and Monroe streets, will, when completed, be the scene of this novel and altogether up-to-date experiment in merchandising. The structure was designed for retail merchants exclusively. There will be no less than 150 shops of one kind or another housed in the skyscraper. Every necessity of life, and every luxury almost, may be purchased on the different floors when the building shall have been completed.

But, according to the present plans of the owners of the building, these merchants will all be bound close together in a co-operative plan of disposing of their wares. There will be a system of co-operative advertising and delivery and a system of co-operative endeavor to please customers.

Building Record of Present Year May Excel 1910's

November's building record was really of the sensational nature, in that the biggest gain of the year was made. It also developed that the new construction for 1911 will at least equal and probably will surpass that of 1910.

The total for the month was $2,012,985. One year ago the same month developed new construction to the value of $1,119,205. As will be seen, the gain was nearly $900,000, or a fraction over 80 per cent. One of the surprising features of the permit record for the month is the fact that Portland's total fell only about $200,000 behind the combined permits issued for the cities of Los Angeles, Seattle, Spokane and Tacoma.

For the first eleven months of this year permits have been issued authorizing buildings valued at $17,856,644, and for the same period in 1910 the total was $16,165,782. The increase is nearly $1,750,000, or practically 11 per cent.

City Building Inspector Plummer estimates that the value of December permits will be around $3,000,000. The total for 1910 was $20,886,202.

There are now in the office of the building inspector on file plans for six fireproof structures which will be permitted some time this month, that will provide for a total expenditure of approximately $2,000,000, leaving $1,000,000 to be made up of permits for residences and smaller durable buildings. The permit record during the past year leaves little doubt that the total value of December's permits will exceed the sum estimated by the building inspector.

New Buildings for Massachusetts Institute of Technology

Among the many suggestive designs offered for the proposed new technology at Cambridge, that of Prof. Despradell, Rotch professor of architecture at the institute, is worthy of careful consideration. In combination with the present Cambridge bridge, and the proposed Harvard bridge, an imposing water front is certain to be developed. The new site with the buildings proposed in Prof. Despradelle's tentative plan would result in a most imposing water front and a dignified setting for the institute.

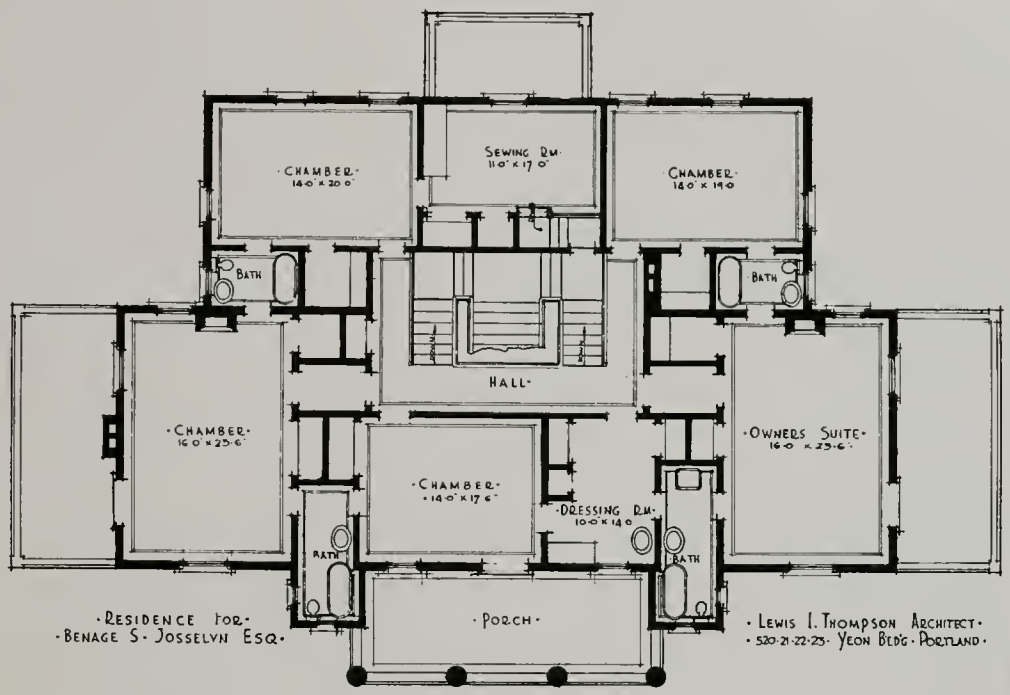
Cement Sofa Next—Edison Promises to Furnish Homes with Concrete

West Orange, N. J.—Thomas A. Edison, who recently startled the world by saying that he would make it possible to build a concrete house for $1,000, today declared that in the near future he would put on the market concrete furniture. Pieces of furniture made in the new way are on their way to Chicago and back to show what they can stand in the way of rough handling by freight men.

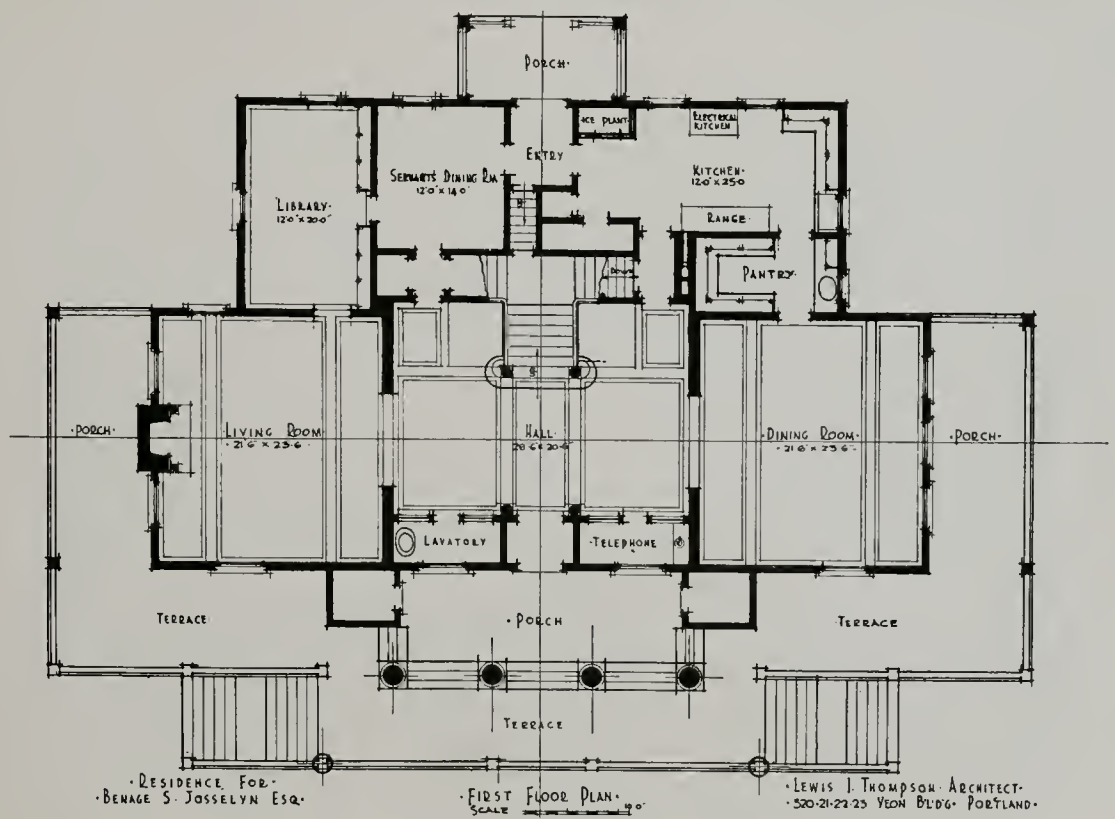
"I am going to put concrete furniture on the market in the near future that will make it possible for a laboring man to put into his home furniture more artistic and more durable than is now to be found in the most palatial residences in Paris or along the Rhine," said Edison today. "And it will be cheap. If I couldn't put out my concrete furniture cheaper than oak that comes from Grand Rapids, I wouldn't go into the business. If Mr. Newly-Wed, say, now starts out with $450 worth of furniture on the installment plan, I feel confident that we can give him more artistic and more durable furniture for $200.

"I'll also be able to put out a whole bedroom set for $5 or $6."

Elevation and Parking, "Josselyn Hall," Residence of Mr. Benage S. Josselyn
Mr. Lewis I. Thompson, Architect, Portland



SECOND FLOOR PLAN
SCALE



First and Second Floor Plans, "Josselyn Hall," Residence of Mr. Benage S. Josselyn
Mr. Lewis I. Thompson, Architect, Portland

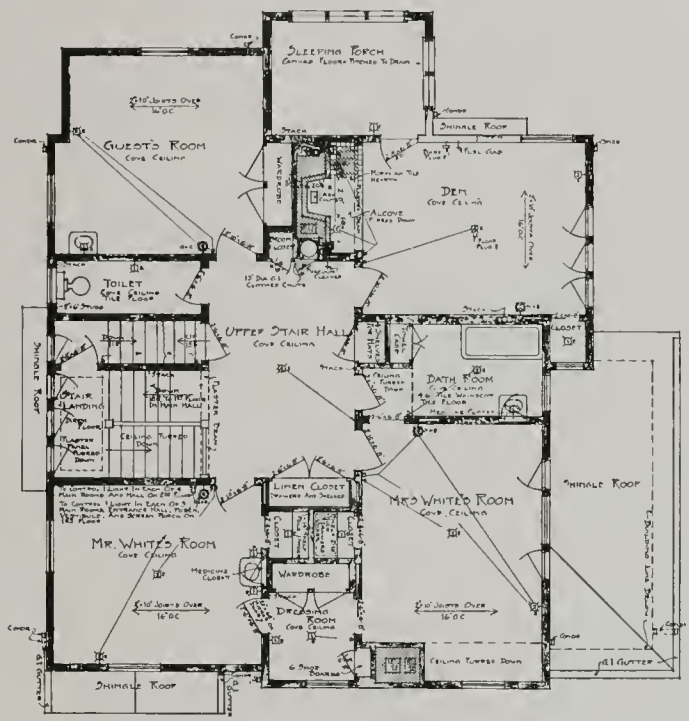
PACIFIC COAST ARCHITECT
DECEMBER, 1911

Side Elevation, Residence of Mr. Isaac L. White
Mr. Edward T. Root, Architect, Portland

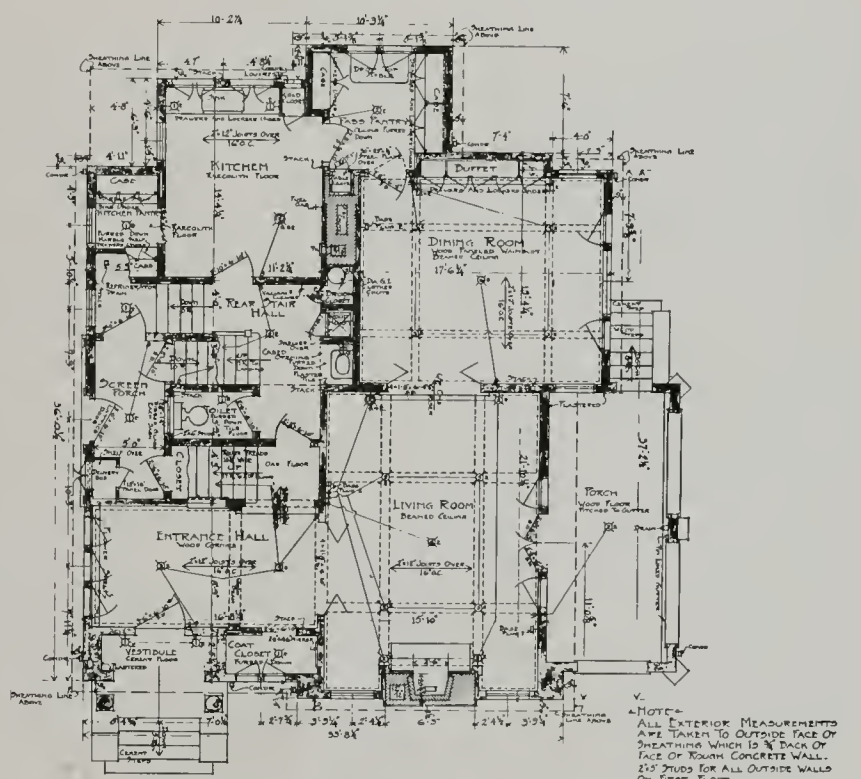
Entrance Hall, Showing Stairway, Residence of Mr. Isaac L. White
Mr Edward T. Root, Architect, Portland

Dining Room, Residence of Mr. Isaac L. White
Mr. Edward T. Root, Architect, Portland

Den, Residence of Mr. Isaac L. White
Mr. Edward T. Root, Architect, Portland



Second Floor Plan
Scale ¼"-1'0"



First Floor Plan
Scale ¼"-1'0"

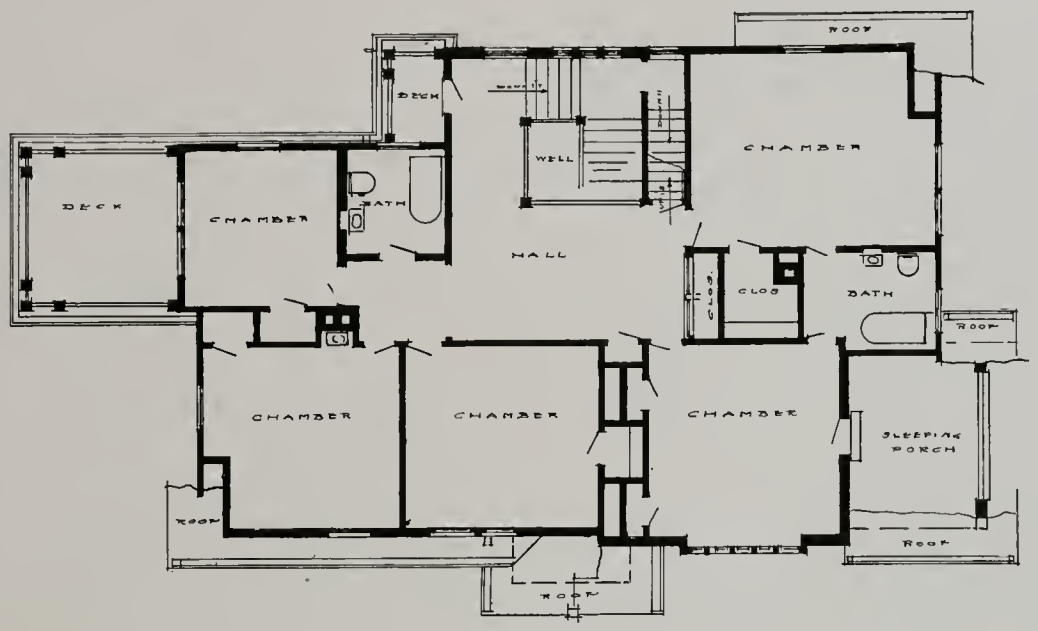
First and Second Floor Plans, Residence of Mr Isaac L. White
Mr. Edward T. Root, Architect, Portland

Side Elevation, Residence of Mr. Blaine R. Smith
MacNaughton & Raymond, Architects, Portland

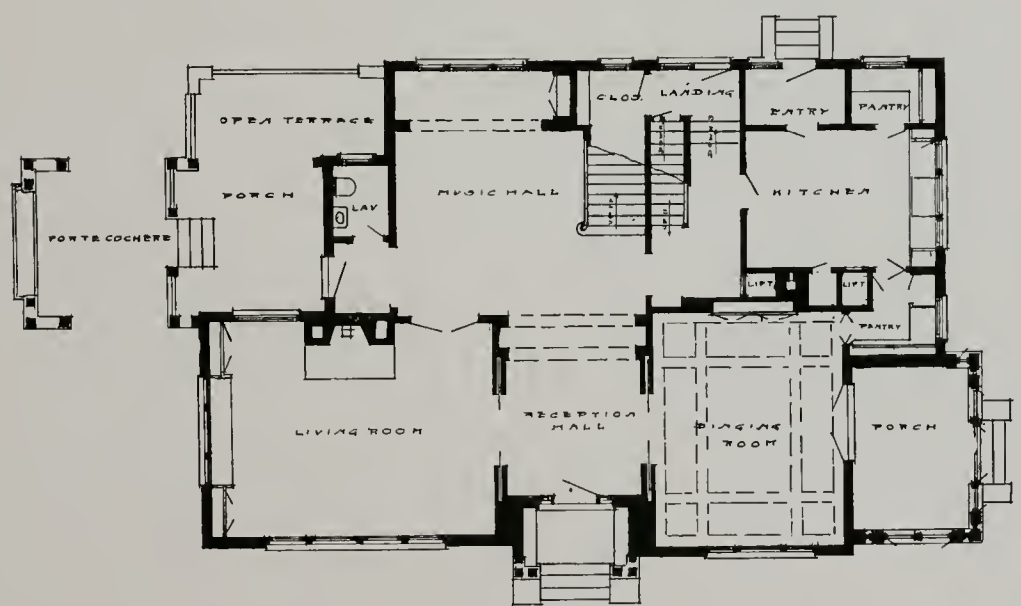
Entrance to Stairway, Residence of Mr. Blaine R. Smith
MacNaughton & Raymond, Architects, Portland

Living Room, Residence of Mr. Blaine R. Smith
MacNaughton & Raymond, Architects, Portland

Dining Room, Residence of Mr. Blaine R. Smith
MacNaughton & Raymond, Architects, Portland



SECOND - FLOOR - PLAN

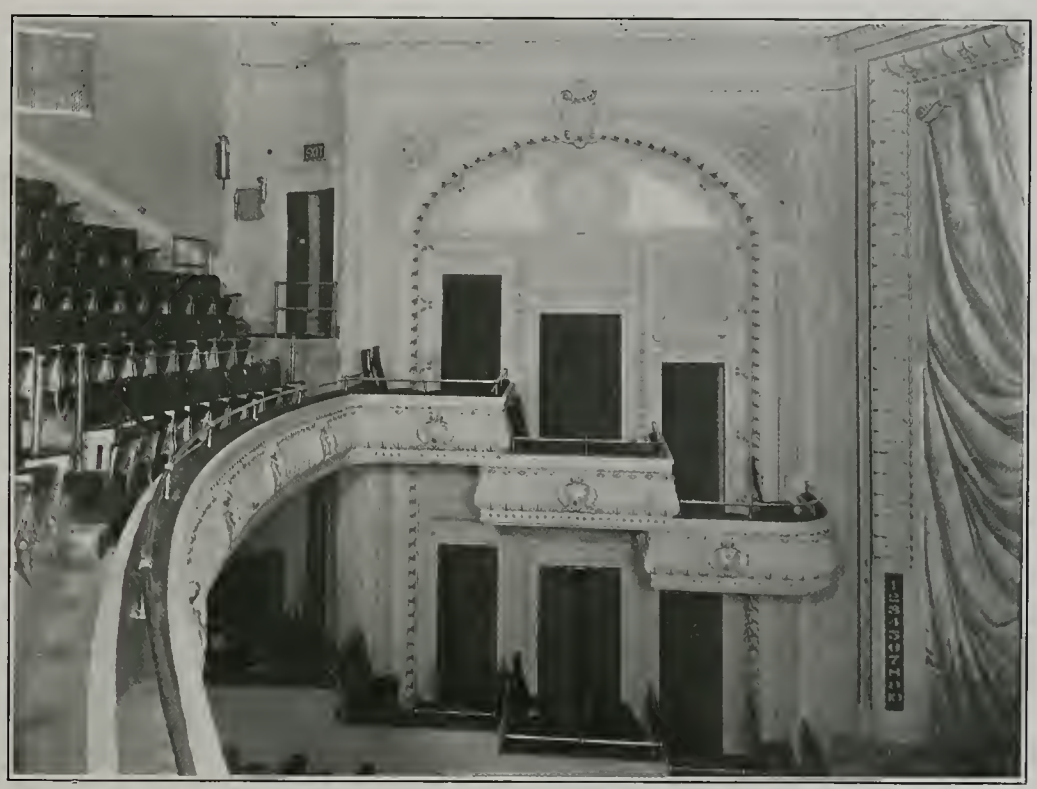


FIRST - FLOOR - PLAN

First and Second Floor Plans, Residence of Mr. Blaine R. Smith
MacNaughton & Raymond, Architects, Portland

Elevation, New Pantages Theatre
Emil Schacht & Son, Architects, Portland

Interior, Showing Proscenium Arch, New Pantages Theatre
Emil Schacht & Son, Architects, Portland



Interior, Showing Boxes, New Pantages Theatre
Emil Schacht & Son, Architects, Portland

President Pond on Architecture in America

The Builder, of London, has taken occasion to differ with President Pond of the American Institute of Architects as to the merits of architecture in America.

We are glad to note that *The Builder*, with a fine sense of justice, did not allow President Pond's statement in which he held American architecture so lightly, to go unchallenged.

We believe the following, from a recent issue of *The Builder*, will be read with interest by members of the profession in this country:

"Mr. Irving K. Pond, the president of the American Institute of Architects, who was present at the institute meeting on Monday, has expressed opinions about the present condition of American architecture which are as frank as they are interesting. We have not before us a complete copy of the address which he delivered to the American Federation of Arts, but the extracts indicate a refreshing point of view and a terseness of statement which are characteristically American. He believes that architecture should before everything express the spirit of the time and country in which it is produced, and he does not find in the work of his own country any expression of the salient characters of its higher civilization, of its idealism, its altruism, and many other fine qualities. And as the conditions of contemporary civilization very remotely correspond with those of ancient Egypt, Greece, or Rome, 'this age,' he says, 'holds no place for the extraneous application of the borrowed finery of art, but must insist on an expression of the vital principles of structure and the rational development of ornament which shall not obscure the vital thought, but which shall be of intrinsic worth in defining the character of the mass, and in conferring charm upon the structure.' And then, with extreme candor, he proceeds to illustrate instances of 'brutal utterances of architectural untruth' from contemporary American work. In referring to buildings designed for banks, theaters, churches, schools, factories, and the like, he holds that we have 'no record of such prostitution of art even in the most debased Roman period.' They seem to be, he says, 'cut off by the rod from some interminable Roman colonnade.' Mr. Pond will find few to disagree with his statement of general principles with regard to the purpose of architecture, although they may find his application open to argument. A national style is not evolved in a day; and, rightly or wrongly, it has been thought that classic work provides the rules of the architectural syntax. Work after the character of Robert Louis Stevenson's 'sedulous ape' may perhaps too frequently be the result of a student's enthusiasm; but we do not think that it would be difficult to prove that contemporary work most likely to endure as representative of the *Zeitgeist*, even including some of the German and Austrian phases of the type known as *l'art nouveau*, has been founded on a knowledge of the structure of classic art."

Omaha Wants Municipal Art Commission

The Commercial Club of Omaha, Neb., is agitating the organization of a municipal art commission in that city. Past experiences have shown the necessity for curbing the well meaning but poorly directed activities of certain people who, unless restrained, are apt to fill the city with many undesirable works that only masquerade under the name of art.

A Resume

Recent items selected from the Daily Advance Reports of The Pacific Coast Architect.

PORTLAND.

Apartment House—Architect Ellis F. Lawrence is preparing preliminary sketches for a high class apartment house for Fred A. Jacobs Company.

Library—Architects Doyle, Patterson & Beach are preparing plans for the new library to be built at a cost of $500,000.

Residence—George C. King erecting a residence on Hawthorne avenue to cost $10,000.

Garage—H. P. Barnhard erecting one-story brick garage on Twenty-first street to cost $10,000.

Residence—B. T. Stapleton erecting two and one-half story frame residence on East Eighteenth street to cost $6,000.

Residence—M. E. Thompson erecting two and one-half story frame residence on Shaver street to cost $6,000.

Packing Plant—Sulzberger & Sons will build a packing plant at North Portland to cost $800,000.

Laundry—Architects Roberts & Roberts are preparing plans for one-story brick laundry building for D. H. Ryan to cost $5,000.

Warehouse—Architect Edward T. Roop prepared plans for a warehouse for the Oregon Transfer Company to cost $50,000.

Store and Hotel—Architects Bennes & Hendricks prepared plans for store and hotel building for J. W. Cook to cost $10,000.

Residence—J. E. Doben will erect two and one-half story frame residence on Multnomah street to cost $5,000.

Apartment House—Hanover Building Company will erect six-story concrete apartment house to cost $85,000.

Office Building—Architects Whidden & Lewis have prepared plans for the erection of a twelve-story office building for T. B. Wilcox, to be built southeast corner Fourth and Pine streets.

Theater—A. L. Levy erecting one-story brick theater building, Twenty-fourth and Overton streets, to cost $8,500.

Business Building—Architects Doyle, Patterson & Beach preparing plans for the erection of a seven-story business building for Woodard, Clarke & Company.

Business Building—Architects Doyle, Patterson & Beach prepared plans for eight-story business building to be built northwest corner Fifth and Washingon streets.

Residence—Mrs. B. H. Hogue erecting a two-story frame residence on East Seventy-fourth street to cost $5,500.

Residence—Architects Roberts & Roberts prepared plans for two and one-half story frame residence for S. C. Schmidt to be built at Astoria, Ore.

Journal Building—Architects Reid Brothers, San Francisco and Portland (R. E. Heine, Portland representative), prepared plans for the erection of Journal building on Seventh and Yamhill streets, to cost $300,000.

Business and Apartment Building—Architect D. B. Flickinger prepared plans for two-story brick business and apartment building to be built for T. B. Richardson at a cost of $24,000.

Residence—Mrs. R. S. Carter erecting two and one-half story frame residence on Twenty-second street to cost $6,000.

Residence—H. Z. Compton erecting two-story frame residence on East Twenty-seventh street to cost $5,500.

Residence—Architects Roberts & Roberts prepared plans for frame residence for Mr. Hibbard to cost $4,000.

Residence—W. A. Dempsey erecting two-story frame residence on Hancock street to cost $9,000.

Flat Building—Charles Arata will erect flat building on Madison street to cost $7,200.

Residence—Architect W. H. Downing prepared plans for two and one-half story frame residence for E. Versteeg to cost $5,500.

Residence—Architect Ellis F. Lawrence prepared plans for a residence to be built for Henry McCall at Prineville at a cost of $15,000.

Bungalow—Architect F. Lawrence prepared plans for a bungalow for A. M. Kees.

Residence—C. S. Jackson erecting two-story frame and brick residence on Hood street to cost $9,000.

Residence—Dr. John F. Worcester erecting two-story frame residence on Fifteenth street to cost $7,500.

Business Building—Architects Birnbach & Meyer preparing plans for two-story reinforced concrete business building for Keating & Flood.

Apartment Building—Architects Claussen & Claussen prepared plans for three-story brick apartment building to cost $35,000.

Market and Office Building—Architects Bennes & Hendricks prepared plans for seven-story reinforced concrete market and office building for H. S. Warren & Company, Detroit, Mich., to cost $300,000.

Clubhouse—Architects Doyle, Patterson & Beach will prepare plans for clubhouse for the Portland Automobile Club to be built at a cost of about $10,000.

Hotel and Store—Architect John G. Wilson prepared plans for two-story frame hotel and store for I. Gratton of Milwaukie, Ore.

Hospital—Architect Robert F. Tegen prepared plans for hospital building for the Sisters of Charity to be built at Walla Walla, Wash., to cost $200,000.

Ice Plant—Architect Arthur J. Maclure prepared plans for three-story reinforced concrete ice plant to cost $20,000.

Residence—Architects Jacobberger & Smith prepared plans for two-story residence for M. F. Brady to cost $15,000.

Grandstand and Bleachers—Architect H. J. Roath prepared plans for reinforced grandstand and bleachers to seat 14,000 people.

Business Building—Architect Fred A. Legg prepared plans for three-story brick business building to cost $20,000.

Business Building—Architect H. C. Dittrich prepared plans for three-story brick business building.

Residence—Architect Charles W. Ertz prepared plans for two-story frame residence to cost $6,000.

School—Architects Harvey & Hogner prepared plans for one-story frame schoolhouse, to be built at Lyle, Ore., at a cost of $8,000.

Residence—Architects Tobey & Mills prepared plans for a two-story frame residence to cost $7,500.

Hotel Building—Architects Doyle, Patterson & Beach prepared plans for the erection of a twelve-story hotel building for the Wright-Dickinson Company to be built corner Oak and Seventh streets.

Class A Building—Architect David L. Lewis prepared plans for seven-story Class A building for the Honeyman Hardware Company to be built corner Ninth and Hoyt streets.

Business Building—Architect Frederick S. Allerton prepared plans for two-story brick business building to be built in Sellwood for J. P. Zirngiebel.

Cottage—Architect Charles W. Henn prepared plans for two-story hillside cottage for Mrs. Mary J. Wallace.

Swiss Chalet—The Spencer-McCain Company prepared plans for a Swiss chalet to be built in Laurelhurst for E. H. Spencer.

Theater—Plans are being prepared for Sullivan & Considine to cost $300,000.

OREGON.

Business Block—Springfield. Fred E. Taylor will erect two-story brick business block.

Hotel Building—Salem. B. R. Westbrook will erect three-story brick hotel building.

Residence—Eugene. Architect Y. D. Hensill prepared plans for residence for Dr. H. B. Leonard.

Hotel Building—Sheridan. Three-story brick hotel building will be erected.

High School—Forest Grove. The district will be bonded to the amount of $20,000 for the erection of the new school building.

Church—Lebanon. The Presbyterians will erect new church building to cost $15,000.

Hotel—Independence. A. L. Sterling will erect 45-room brick hotel.

Depot—The Dalles. The O. W. R. & N. prepared plans for depot to cost $25,000.

SEATTLE.

Warehouse—The Diamond Ice and Storage Company erecting three-story reinforced concrete warehouse to cost $70,000.

Field House—Architects Bebb & Mendel prepared plans for two-story brick field house to cost $50,000.

Garage—Charles Haynes prepared plans for two-story concrete garage to cost $30,000.

Business Building—Architect Harlan Thomas prepared plans for three-story brick business building to cost $40,000.

Lodge Building—Architect John Carrigan prepared plans for the erection of an Elks' building, to be built at Fourth and Spring streets, to cost $150,000.

Business Building—The United States Tire Company are erecting a two-story brick business building to cost $20,000.

Apartment Building—F. M. Stanley is erecting a four-story brick apartment building at a cost of $45,000.

SPOKANE.

Auditorium—A campaign has been started for the erection of an auditorium. No architect chosen.

Lodge Building—Architect Julius Zittel prepared plans for lodge building for the Knights of Columbus to cost $75,000.

Apartment House—Leo Brown will erect four-story brick apartment to cost $100,000.

School Building—Architect Robert C. Sweatt prepared plans for school building to be built on Cannondale at a cost of $50,000.

WASHINGTON.

Church Building—Walla Walla. Architects Beezer Brothers (Seattle) associated with Henry Osterman of Walla Walla preparing plans for Congregational church, to cost $150,000.

Business Building—Bellingham. Ecklund & Harris erecting two-story brick business building to cost $20,000.

Railway Shops—Pasco. Decks, Decks & Smith of St. Paul awarded contract for the erection of shops, roundhouse and other buildings for the Northern Pacific to cost $250,000.

Packing Plant—Colfax. Mareck & Wever will erect packing plant to cost $25,000.

Business Block—Chehalis. A. F. Scherer will erect two-story business block to cost $20,000.

Business Building—Wenatchee. Mrs. E. C. Lillis will erect three-story reinforced concrete business building.

City Hall—Olympia. Plans have been prepared for a new city hall to cost $180,000.

Factory Building—Aberdeen. The Western Cooperage Company will erect additions to their plant to cost $30,000.

Warehouse—Tacoma. Architects Woodruff & Constable have prepared plans for four-story concrete warehouse to cost $50,000.

School Building—Tacoma. St. Leo's parish will erect three-story brick school building to cost $50,000.

Buildings and Tanks—Aberdeen. The Standard Oil Company will erect buildings and tanks to cost $150,000.

Residence—Pullman. Prof. Rudolph Weaver of the State College has prepared plans for the erection of a residence for the president.

School Building—Vancouver. A campaign has been started for the erection of a $100,000 school building.

Club Building—Tacoma. Architect C. F. W. Lundberg has prepared plans for a clubhouse for the Tacoma Yacht Club to cost $30,000.

Bank Building—Vancouver. The United States National Bank are having plans prepared for a six-story bank and office building.

BRITISH COLUMBIA.

Hotel—Victoria. The Canadian Pacific will erect a six-story wing to the Empress Hotel to cost $250,000.

Apartment House—Vancouver. Architects Quandt & Creutzer prepared plans for a six-story concrete apartment house to cost $150,000.

The J. D. Tresham Mfg. Co.

The J. D. Tresham Mfg. Co., 220 and 222 Grand avenue, while a new concern, has attracted the attention of many of the progressive architects and contractors of the coast by the work they are turning out. Their recent work on the Pantages Theater has demonstrated the quality of their work.

A large contract near the completion is that of the new Multnomah Hotel, the lobby and lodge halls of which show the beauty of ornamental plastering when handled by experts. C. W. Heal, superintendent of the company, is an artist and mechanic of exceptional ability, and has added much to the contracts of the new concern. The company has secured the contracts for the Goode Hotel, Sixth and Hoyt streets, and the Goode Hotel No. 2, Sixth and Everett streets.

Texas State Association of Architects

The annual convention of the Texas State Association of Architects convened at Ft. Worth on November 13th. The meetings were held in the parlors of the Westbrook Hotel. The convention was in session during the 13th, 14th and 15th.

The principal topic discussed was the desirability of securing legislation that would insure the improvement of the architectural standards of the State of Texas.

A uniform contract between architect and client for use throughout the state was adopted.

Officers elected for the ensuing year are as follows. M. R. Sanguinet, Ft. Worth, president; J. Ed Overbrook of Dallas, F. S. Glover of Houston, C. V. Senter of San Antonio, Otto Lang of Dallas, O. J. Lorehn of Houston, M. W. Scott of Waco, vice presidents; J. Stanley Fields, Ft. Worth, secretary-treasurer.

It was decided to hold the next annual convention at Houston.

The World's Fair Commission

The Board of Directors of the Panama-Pacific Exposition has selected the architectural commission which is to advise and assist the executive committee in planning the architectural features of the big fair. The commission is composed of William Curlett, Albert Pissis, Willis Polk, Clarence R. Ward and John Galen Howard—all able men for this work. All five are well known, not only in San Francisco but throughout the Coast, and are acknowledged leaders of their profession.

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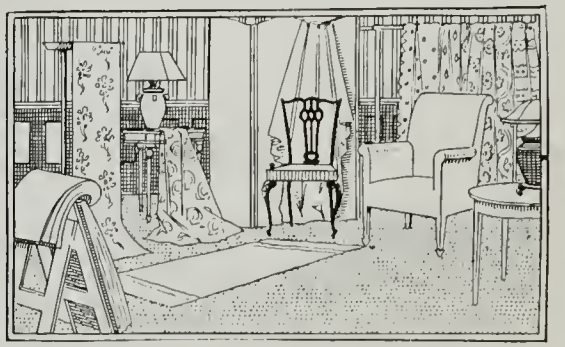

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VOLUME 2 JANUARY, 1912 NUMBER 4

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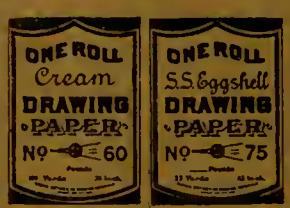

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The Pacific Coast Architect

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The Editor will be pleased to consider contributions of interest to the readers of this publication. When payment for same is desired this fact should be stated. Self addressed envelopes must accompany all such contributions.

ADVERTISING RATES ON APPLICATION TELEPHONE MARSHALL 236

Current Comment

We've got a good start into 1912.

Here's hoping that everybody will be prosperous.

Building activity in coast cities shows no signs of a slump.

Our mild winters are a great help to the building contractors.

The greater the number of class A buildings the greater the increase in values and the lower the insurance rate.

Coast architects are gradually evolving a Western type of architecture which in time will become permanent and distinctive.

With the development of the outlying districts there is a steady increase in the building of dwellings. Portland is yearly becoming more and more a city of homes.

Though there are many apartment houses, there appears to be no cessation in the matter of erecting more. The non-owner in Portland is becoming more and more an apartment dweller. Houses and rented flats are less and less in demand.

President Taft in announcing that the Panama Canal would be opened June 1, 1913, a year and a half ahead of the originally scheduled time, incidentally did much to revive the Pacific Coast lumber industry. This will have a tendency to help all business interests, and the contractor and builder will not be the last to feel it either.

Although this appears to be an era of steel and concrete as the favorite building materials, there is no diminution in the demand for Oregon fir and other coast lumber. Neither do our brick industries appear to be waning. There are superior qualities of marble deposits in Oregon destined to become in great demand, and some fully equal to the choicest Italian marble. Our building stone, apparently neglected for the present, is by no means forgotten.

F. O. Thomson, formerly editor of the PACIFIC COAST ARCHITECT, is no longer connected with this publication. We understand that Mr. Thomson will enter business for himself. We wish him unbounded success in his new field.

Pacific Coast's Building Advancement

The building progress of the Pacific Coast cities for 1909, 1910 and 1911 reaches into enormous totals. When one considers that there are thousands of smaller towns from which no reports whatever have been received, and in many of which no official record of progress is kept, it is safe to estimate that 35 per cent might be added to the total figures officially reported, which would give one an idea of the tremendous strides that have been made It is admitted by the most competent authorities that the cities and towns of the Pacific Coast states are increasing in population more rapidly than any other section of the United States. With the increase of population there is an increasing need of dwellings, business blocks, apartment houses, office buildings, warehouses, manufactories, etc. The people must be housed and they must be provided with suitable structures in which to carry on business enterprises.

The outlook for 1912 indicates that all previous records in the building line will be eclipsed this year. The opening up of remote districts in the interior of Oregon by transportation lines recently completed and great railroad projects to be carried out this year or within the next two or three years will enormously stimulate the development of Oregon. Sister states are also being developed along similar lines, though in less degree, and the sum total of increase in population and the increase in building that must follow as a logical sequence will tremendously increase the wealth per capita. Another factor that will aid the entire Pacific Coast country is the opening of the Panama canal, which will afford a powerful stimulus to our growth.

An examination of the figures in detail is convincing of the conclusions drawn, and these follow:

PORTLAND.

In 1909 the total building permits for the year showed the progress in building at $13,489,580; in 1910, $24,604,957; in 1911, $19,095,840. The total for the three years named is $57,190,377.

SALEM.

The building construction for 1910 included 439 structures, valued at $2,111,283, and for 1911 $2,000,000.

SEATTLE.

The building record of Seattle for the three years named reveals the following: 1909, $19,044,335; 1910, $17,418,078; 1911, $7,491,156; total for three years, $43,953,569.

OLYMPIA.

In 1910 dwellings to the amount of $75,150 and business blocks valued at $53,150 were erected, a total of $128,300. The total for 1911 was $177,357.

SPOKANE.

Spokane erected 2436 buildings in 1910, valued at $5,932,969, and 1737 in 1911, valued at $3,312,530.

SAN FRANCISCO.

1909 was the heaviest building year for San Francisco in the figures shown, when the total reached $25,403,571. In 1910 the year's totals were $20,546,547 and in 1911 $20,915,484. Total for three years, $66,865,602.

LOS ANGELES.

Los Angeles' advance has been very gratifying. The totals show: 1909, $13,360,702; 1910, $21,684,100; 1911, $23,004,185; three years total, $58,048,987.

OAKLAND.

1911 was the greatest building year Oakland, Cal., has enjoyed for the three years just passed. Here are the totals: 1909, $5,318,525; 1910, $6,913,640; 1911, $6,992,260. The total for the past three years, $19,224,425.

SAN DIEGO.

San Diego has shown a steady advance year by year since 1909, as is amply attested by these figures: 1909, $2,632,100; 1910, $4,005,200; 1911, $5,713,605; total for three years, $12,350,905.

SACRAMENTO.

Sacramento has also shown a steady growth in building statistics. This is the record: 1909, $2,063,391; 1910, $2,326,606; 1911, $3,087,392; three years total, $7,477,392.

Deserving of Leniency

We note that it is the announced intention of the county commissioners to impose a fine upon the Pacific Iron Works of Portland on account of delay in supplying the structural steel for the new court house.

We trust this action will not be taken. The Pacific Iron Works is deserving of leniency and is entitled to encouragement as a home industry. Portland manufacturing industries employing mechanics and other workmen are deserving of support and encouragement. The promotion funds of our local commercial bodies are bringing many men to the Pacific Coast. It is to the interest of all that these men be given employment for the good of the entire community. Our local iron industries are in the process of evolution. Our iron works are beginning to specialize, which has been impossible to do in the past. That is where the Eastern plants have had the advantage over our local shops, as they are all specialists in some particular line.

Our fabricators of structural steel are rapidly increasing their plants so that they will soon be in shape to furnish iron and steel as promptly as Eastern factories.

As an example of growth the Pacific Iron Works, at first a modest 50 x 50 at Second and Davis streets, was compelled to move to its present location on East Burnside street into a plant 200 x 300 feet to accommodate its increasing business. This plant will continue to grow. It is suicidal policy to strangle local industries by excessive fines, which in the case under consideration we feel to be undeserved.

On Competition in Oregon

The history of competition in Oregon extending over the past ten years shows one fiasco after another, until people and the press alike have come to believe there is nothing good in this method of selecting architects. Never until the recent auditorium competition was there held in Oregon a competition under the code of the American Institute of Architects, and yet many architects have been apparently willing to waste their endeavors over and over again with the absolute knowledge that there was no guarantee of fair play in the conduct of the competitions, only after the results have been announced to complain in bitter denunciation of juries, owners and competitions.

When the committee from the Portland Architectural Club appeared before the charter revision commission of three years ago asking for the passage of some provision calling for the selection of architects for municipal work by competitive methods approved by the A. I. A., it was this past history, with its story of legal complications and mutual dissatisfaction, that caused the commission to refuse to incorporate in its draft such an ordinance. It was the same cause that defeated the state law providing for state competition for the larger state and county buildings. It was largely this same history and one-man criticism of the auditorium competition that prevented the Oregon Chapter of the Institute from obtaining another fairly conducted competition for the selection of an architect for the new public library.

We venture to predict that history will repeat itself and that competition in the future will be hard to obtain in this state unless the public and the press are made aware of the true status of the success of the auditorium competition. The public criticism directed against the recent competition so far is confined to one competitor, and it may or may not be just. We are convinced, however, that whatever else may be said of the competition, the jury did its work conscientiously and fairly with no knowledge of the authors of the designs being judged, so in our minds the criticism cannot hope to accomplish anything for the upbuilding of the architectural profession, but will, on the other hand, by its attacks on the intelligence of the jury, give further ammunition to the "enemies of architectural competition for public work."

We believe that the architectural press should print only such matters as will elevate the architectural profession, and we call attention of our readers to the contrast between the attitude of *The American Architect* and *The Architect and Engineer*. *The American Architect* refused to print the criticisms, but featured the state chapter's endorsement as follows:

"Oregon State Chapter Endorses Conduct of Portland Auditorium Competition.

"The recent quite unwarranted criticism in certain quarters as to the conduct of the competition for the Portland, Ore., public auditorium has led the Oregon State Chapter to adopt the following resolution.

"Be it resolved that the Oregon State Chapter of the American Institute of Architects herewith expresses its approval of the conduct of the recent Portland public auditorium competition.

While it is gratifying to note the stamp of approval placed on this competition by the highest ruling power in the immediate neighborhood, the unimpeachable character of the professional adviser and the gentlemen that constituted the jury is sufficient evidence that this competition had been throughout conducted with due regard to the ethics of architectural practice.

The Architect and Engineer featured in red ink the disgruntled competitors' criticisms, while it hides the reso-

lution of the Oregon State Chapter endorsing the conduct of the competition. If we may be permitted to advise in the matter we would suggest that for the sake of future competitions nothing but praise should be said of the auditorium competition.

A former president of the Washington State Chapter of the American Institute of Architects passed through Portland during the exhibition of the auditorium plans. After a careful perusal of them he expressed his opinion that there was but one design in the whole exhibition warranting the judgment. It was that of Messrs. Freedlander & Seymour.

DEPUTY CITY AUDITOR WIEGAND'S STATEMENT.

Relative to your inquiry as to the manner of handling designs submitted in competition for a public auditorium to be erected in Portland, Ore., I have the honor to reply that designs, as wrapped by the competitors or their agents, were placed in the hands of the auditor by said competitors or agents prior to 2 o'clock p. m., October 25, 1911. Unopened and in the same condition as when received, they were then placed in a vault in the auditor's office for safe keeping until they might be required by the jury, at which time they were taken by me, as the mayor's representative, to the quarters secured by the city for the use of the jury.

But one set of drawings was opened at a time, and that in the presence of two members of the jury, newspaper representatives and one or more members of the commission. The four drawings, the description and the sealed envelope containing the name of the competitor were numbered before another set was opened, and the numbered envelopes taken by me to the mayor and placed in his keeping.

When the jury had notified the mayor that their report was ready he delivered to me the numbered envelopes, which I then took to the quarters used by the jury. After having received the report of the jury I opened the numbered envelopes one at a time, numbering the contents as the envelopes had been numbered, which was done in the presence of the jury, newspaper representatives and the members of the auditorium commission.

Since the jury had made their report in accordance with the numbers placed on each envelope in the beginning, the selection of those awarded prizes and given honorable mention by the jury was of course a simple matter.

APPROVES AUDITORIUM COMMISSION.

PACIFIC COAST ARCHITECT, *Portland, Oregon*:

Gentlemen—I am directed by the Oregon Chapter of the American Institute of Architects to transmit to you the following resolution adopted at their meeting November 23, 1911:

Be it resolved that the Oregon State Chapter of the American Institute of Architects herewith expresses its approval of the conduct of the recent Portland public auditorium competition.

Yours truly,

FRANK LOGAN, Secretary.

Philadelphia Chapter Notes

PHILADELPHIA, PA., December 29, 1911.

The chapter held two meetings in December in addition to the banquet which was given on the night of December 7th. The first, a regular meeting, was given over principally to a discussion of various matters of importance to the profession which might come up at the annual convention in Washington. Many of the delegates were present, the call for the meeting having stated that this discussion would take place and that the delegates desired to ascertain the views of the members so as to better represent them at the convention.

Several subjects were touched on, the principal one being that of competitions, which led to the adoption of the following instructions of the meeting to the delegates:

"The present system of competition regulation has proved, in the opinion of this chapter, to be so beneficial to that method of selecting architects that the delegates from this chapter are hereby instructed to use every proper means at the forthcoming convention of the institute to prevent any changes which will affect the general system of competition regulation."

Mr. W. L. Plack, the official delegate from the chapter to the recent International Congress of Architects held in Rome last October, read a most interesting report on the congress and his participation therein, which report appears elsewhere in this issue.

After further discussion on the subject of the proper form and location of the Lincoln memorial in Washington resolutions were unanimously adopted, which are published in this issue.

The special meeting was held for the purpose of passing a supplemental resolution to specifically condemn a roadway or any form of memorial to Lincoln other than a dignified monument in a proper location, which resolution was unanimously adopted.

COMMITTEE ON PUBLIC INFORMATION OF THE PHILADELPHIA CHAPTER A. I. A.

By D. KNICKERBACKER BOYD,
Chairman.

International Congress of Architects

Your delegate begs to report that he sailed for Italy on the steamship Verona September 15th, landed at Naples September 29th, went by rail to Rome on Sunday, October 1st, and reported at the convention hall in Rome Monday at 10 a. m. But a few of the foreign delegates attended the first meeting. Mr. George Oakley Totten, secretary of the American section, Mr. George D. Mason of Detroit, Mich., and myself were the only Americans present. There were no papers nor discussions during the first day. In the evening the delegates were tendered a reception by the Associated Artists of Rome in their beautiful galleries and club rooms. Most of the foreign delegates displayed magnificent decorations emblematic of royal favors of their several countries, but after a few hours of social intermingling the spirit of equality prevailed among the three or four hundred ladies and gentlemen present, notwithstanding the fact that four or five languages were spoken by those present.

The following ten days were devoted to short sessions in the forenoon and visiting places of interest in the afternoon, usually in large groups. Several whole day excursions were made to near-by places of interest, that to Tivoli being perhaps the most interesting and best attended.

The papers were read almost invariably in French, Italian or German, and upon several occasions it was quite amusing to observe the foreign mannerisms in discussion and the attempts to translate and interpret so that the others might understand what was taking place. It was quite noticeable, indeed, that after the second day each succeeding meeting had less attendance, the reason being that all the papers and discussions were to be finally printed in the four languages and distributed to all those present before the end of the present year.

The executive committee of the congress went into session the afternoon of Tuesday, the 10th, to consider the next meeting place. The American section, the Greek section, the German section and the Russian section each presented a formal invitation for the next congress. The

English section partially promised and were expected to support the United States, but on the final vote they sided with Russia, and St. Petersburg has been selected for the Tenth International Congress.

There were but nine American representatives, only three of whom were official delegates. The architects from America were Irving K. Pond, Frank C. Baldwin, George D. Mason, E. W. Donn, Jr., of Washington, D. C.; David J. Myers, of Seattle; B. F. Willis, of York; Richard Philipp, of Milwaukee, and George Oakley Totten, the secretary, and myself, of Philadelphia.

On Thursday night, October 12th, about 140 of the delegates went to Venice, where we spent Friday, Saturday and Sunday. We were received by the architect of the new Campanile, who also has charge of the restorations to the foundations of St. Mark's. An official reception was tendered us in the ducal palace by the city authorities on Saturday, and on Sunday one of the state steamers was placed at our disposal and we were taken out quite a distance into the Adriatic, and upon our return were received by a committee of the city authorities, who had a magnificent banquet prepared for us at the new summer hotel on an adjacent island. The delegates then departed in different directions, a few of whom returned to Rome and the south of Italy. Many went north through Germany. Mr. Mason and myself went to Florence, where we remained together four days. I left him there and went to Milan for a day, to Paris four days, to London three days, and was fortunate enough to get a state room on the Lusitania and sailed from Liverpool Saturday, October 28th, for home.

At the regular December meeting of the Philadelphia Chapter of the American Institute of Architects the following resolution was adopted:

Whereas, The Sixty-first Congress passed an act appointing a national commission with authority to select a site and a design for a memorial to be erected to Abraham Lincoln, to be located in the City of Washington, subject to the approval of Congress; and

Whereas, The Washington Park Commission, whose valuable labors, culminating in its report dated January 1, 1902, included the suggestion of a site for a Lincoln memorial which they considered the most appropriate and fitting site in the whole District of Columbia for a memorial to Abraham Lincoln; and

Whereas, The National Fine Arts Commission, after giving careful study and thought to the question, approved the site chosen by the Park Commission; and

Whereas, The Park Commission in selecting a commanding and conspicuous site for the Lincoln memorial were governed by the conviction that such a monument should stand without a rival in location, save only that of the Washington monument, which is a memorial to George Washington, upon the theory that no other man in the history of the nation is worthy to be named with George Washington; now, therefore, be it

Resolved, That the Philadelphia Chapter of the American Institute of Architects does earnestly advocate the site recommended by the Park Commission as being the most suitable and appropriate in every way for a memorial to Abraham Lincoln; and be it further

Resolved, That copies of this resolution be sent to the Lincoln Memorial Commission, to the senators and representatives in Congress from Pennsylvania, and to Glenn Brown, secretary of the American Institute of Architects, The Octagon, Washington, D. C.

At a special meeting of the Philadelphia Chapter the following supplemental resolution was adopted:

Whereas, The construction of a roadway as the Nation's memorial to Abraham Lincoln is now being advocated; and

Whereas, The first consideration of any memorial to an individual should be its power to arrest and hold the interest of the observer by its appropriate character; now, therefore, be it

Resolved, That the Philadelphia Chapter, American Institute of Architects, desires to register its emphatic opposition to the construction as a memorial of such a roadway, which, however useful it might be, would in the opinion of this body be inappropriate and unsuitable as the national memorial to Abraham Lincoln, and would lack the monumental and tangible quality such a memorial should possess.

Black Marble Deposits in Oregon

It will be of great interest to the architects and builders on the Pacific Coast to know that the extensive deposits of a splendid grade of black marble have been found near the town of Joseph, Wallowa County, Oregon and preparations are now under way to quarry the same and place it on the market in the near future.

Mr. C. S. Jackson, publisher of the *Oregon Journal*, who is now erecting an eleven-story building for his paper in Portland, takes great pride in local products and developments, and his building will be the first large building to use in part a native marble.

For some time the rock above mentioned has been used for burning lime, and has turned out a very fine product. Mr. W. E. Leffel, one of the owners of this property, recently had a block of the rock cut and finished, and to his surprise it took a perfect polish. Mr. R. E. Heine, representing Reid Bros., the architects of the Journal Building, examined the quarry with Mr. Leffel and says in part as follows: "The marble is of very good quality, some of it pure black and some black with white and gray veins. The stone is hard and most of it free from seams. I would urge the installation of channeling machine and saw so as to get blocks of commercial size on the market. We will be glad to use some of this marble in the Journal Building, and hope that the owners of the quarry will not disappoint us in getting the material out."

Inquiries regarding this marble should be made to the Blue Marble Lime Co. of Joseph, Ore., and from the appearance of matters the outlook for the development of a new industry is extremely promising.

Effective and Inexpensive System for the Preservation of Foodstuffs

Consumers of ice and patrons of refrigeration plants will soon be offered an opportunity to supply their own needs, in their own homes or places of business, at a fraction of the price now paid, and meet their requirements at any hour of the day or night. All this is due to the fact that inventive genius has produced an ice and refrigerating machine adaptable to the consumer of a few pounds daily, as well as that of the concern using many tons. The Hudson ice machine is the one successful small machine in existence capable of all these things.

The fortunate owner of a machine of this description can produce ice or intense cold in the household or place of business at any season of the year and any hour of the day at a cost so low that it is scarcely worth mentioning.

Think of the convenience of ice and refrigeration under your own control. Think of what it means to make ice on short notice and keep food of all kinds in perfect condition indefinitely by means of cold.

Some people never hand in an item of news for publication, but if we happen to miss an item in which they are interested they are sure to hand us a north pole stare that would freeze the liver of a polar bear.

Vitrified Brick in Building Construction

ARTICLE ONE

By JOSEPH K. MOORE, Assistant Manager Western Clay Co.

Brick is the most efficient building material for use in the Northwest. By an efficient material we mean that which gives the greatest service for the least expenditure. Brick meets the requirements of efficiency in that it is enduring; it meets the local climatic conditions; it suffers no deterioration; it costs less to insure; it needs neither paint nor repairs, and it is the aristocrat of building materials for achitectural treatment.

RESIDENCE, MR. ROBERT P. GREEN
Mr. Charles Haynes, Architect, Seattle, Wash.

In the Northwest we have a climate which gives excessive moisture and a great number of gray days during the winter months. The country which most nearly corresponds in climatic conditions to our own is England. Many a traveler has returned from this country with tales of the picturesque homes quite unaware that the underlying cause of their charms rests in the material—brick—which has endured sunshine and storm since the Conquest, and whose beauty has only been thereby enhanced.

Since the time the Assyrians were at the zenith of their power man has been improving in the manufacture

RESIDENCE, MR. S. J. STILLWELL
Mr. Warren A. Gould, Architect, Seattle, Wash.

THE HOLLYWOOD APARTMENTS
Graham & Myers, Architects, Seattle, Wash.

of brick. Then it was only possible to produce low heats, and the products of their furnaces were porous and not so pleasing in appearance. Even at the time the many beautiful specimens of early English brick work were constructed the problem of light colors and reduced density had not been worked out. Today brick are turned out of the modern kilns in nearly every color and shade, as well as nearly every conceivable shape and texture.

RESIDENCE, MR. M. H. YOUNG
Mr. James H. Chack, Architect, Seattle, Wash.

One of the latest improvements which has been made in the technique of brick manufacture is that of producing a non-absorbing brick, namely, one which is impervious to moisture. This brick is known as vitrified brick, and is especially adapted to construction in the Northwest, where it is highly imperative that a material, to be enduring, must be resistant to the action of the rains. This material is now produced in all the rich red tones so well suited to counteract the depressing effect of our gray days.

The building paver shape of this brick being largely used in the construction of the more artistic homes in the Northwest may be seen by the illustrations accompanying this article, and we feel sure that we are rapidly approaching a new era of home building in this section of the country when a building material will be sought which satisfies both the requirements of efficiency and beauty.

Portland Building Inspector's Annual Report

We herewith publish the annual report of H. E. Plummer, the Portland building inspector, for the year 1911:

Portland, Ore., January 8, 1912.

To the Honorable Mayor and City Council, City Hall, City:

Gentlemen—I respectfully submit the annual report for the department of buildings for the year 1911. The year has been one remarkable for activity in building operations, and there has been a material increase in the number of permits issued over any previous year. While there is a decrease in the valuation of permits issued as compared to 1910, the actual amount of building work executed in 1911 is larger than any previous year. This is explained by the fact that permits were issued during December, 1910, of an extraordinary number and valuation, for the reason that many desired to build under the provisions of the old ordinance, which was not so severe as the present code. Practically all of this work was executed in 1911, and some of it was not completed until late in the year, consequently a considerable portion should be considered as a part of the 1911 total, and if this was done the totals for 1911 would exceed those of 1910.

The operation of the new building code has not worked the hardship that was anticipated by some, and after a number of modifications were made the number of complaints regarding the requirements were reduced to small proportions. One thing which assisted in reducing the number of complaints has been the work of the board of appeal, a new body provided for in the code, and the work of this body is very valuable, as many important decisions have been rendered. The members of the board have given a considerable amount of time to this work, as twenty-nine meetings were held, but it is probable that the number of meetings will be reduced this coming year when the code is amended to its proper form. This has been largely done, and the most vital criticism which can be offered in regard to the code at the present time is that it is complicated and has too many words. Both of these defects can be remedied, however, if they are kept in mind when amendments are prepared. On the other hand, the advantages of the code are many, but as mention has been made of them before no statement will be made regarding them except to state the general results.

The inner district is rapidly becoming a district of fireproof buildings, which will be an excellent barrier to prevent a general conflagration, and all apartment houses, hotels and lodging houses which are now being erected provide for much greater protection to the lives of the occupants.

The department of buildings is advancing each year, and one long step in advance is the creation of the division of electrical inspection, which has been started in the past few months. This is something that Portland has been needing for a long time, and I hope that a sufficient number of deputy inspectors of electricity will be provided so that long standing bad conditions can be speedily remedied. I believe that it will be necessary to have at least four deputy inspectors to do this work properly.

There has been an increase in efficiency in the work done by the inspectors over any previous year, although the department was more or less disorganized at different times during the year. This is shown by the fact that the average number of inspections for each inspector per day was 20.8 in 1911, and in 1910 the number was 17.4. Special work has been done by the department in connection with the installation of automatic gates and trap doors for elevators in existing buildings. A large majority of buildings needing this protection have been altered to comply with the regulations, which has improved the conditions among the older buildings in the city as regards to fire protection.

The outlook for 1912 is encouraging, as the recent appointment of a chief inspector of construction will relieve the inspector of buildings of considerable routine work and will enable necessary work to be done in connection with the proper organization of the department which it is impossible to undertake under the former conditions.

The work of the department has grown to such an extent that it is very probable that it will be necessary to increase the number of employes having charge of the public counter. The reasons for this are evident when it is considered that the department has undertaken the following new work during the year: issuance of street permits, issuance of permits for signs and bill boards, issuance of permits for electrical work, and there is a prospect of issuance of permits for electric signs.

It will be necessary to increase the number of deputy building inspectors of the department to properly look after signs and bill boards, as well as the construction of buildings. I feel that the least number with which this work can be properly undertaken will be two in addition to the five deputies that were in the department during 1911. In addition I wish to recommend the employment of an elevator inspector at a salary of not less than fifteen hundred dollars per year, as I feel that work of this kind has been given too little attention by the city in the past. The new code provides for safety devices on freight and passenger elevators, but there is no one in the department who is fully competent to look after all this work.

I wish to recommend the purchase of an automobile for the department for the use of the inspector of buildings and the chief inspectors, as the efficiency of the department will thereby be much increased.

Respectfully submitted,

H. E. PLUMMER,
Inspector of Buildings.

During 1910 6523 permits were issued, valued at $20,886,202, as against 7686 permits in 1911, valued at $19,152,370. In 1911 95 permits were issued to wreck buildings valued at $54,900; 138 permits, valued at $61,105, were granted to move buildings, and 48 permits for excavations, totaling $85,000.

The total number of permits taken out for alterations and repairs was 2631, valued at $1,873,080. There were 4486 frame buildings erected of the value of $9,183,139, and 184 permits issued for ordinary construction valued at $2,368,696.

Of mill constructed buildings Portland erected 29 in 1911, valued at $572,650; of semi-fireproof buildings, 14, valued at $73,400; of buildings of reinforced concrete construction, 50, valued at $2,909,000; of steel frame construction, 9, valued at $1,911,400; of fireproof buildings, 2, valued at $60,000; total, $19,152,370.

The list of new buildings, graded according to occupancy, were as follows:

Grade I (public buildings, including school buildings, theaters and detention buildings)—68, valued at $2,303,500.

Grade II (including hotels, office buildings, store buildings, warehouses and factories) 295, valued at $4,163,555.

Grade III (including apartment houses and tenements)—80, valued at $1,259,650.

Grade IV (dwellings and flats)—3224, valued at $7,915,250.

Grade V (including stables, sheds, etc.)—805, valued at $728,105.

Grade VI (miscellaneous)—39, valued at $93,115.

Building permits have been issued during the past years as follows:

	Permits.	Valuation.
1900	392	$ 944,985
1901	745	1,529,143
1902	1244	2,730,660
1903	1628	4,281,056
1904	1720	4,029,225
1905	2318	4,183,368
1906	3166	6,902,032
1907	3890	9,446,982
1908	4849	10,405,151
1909	4739	13,481,380
1910	6523	20,886,202
1911	7686	19,152,370
Number of inspections 1910		18,166
Number of inspections 1911		27,401
Valuation of permits for day (working) 1911		$63,000
Number of permits for day 1911		25
Number of prosecutions in Municipal Court 1910		35
Number of prosecutions in Municipal Court 1911		33
Dangerous buildings strengthened in 1911		11
Dangerous buildings—occupants required to move		6
Dangerous or damaged buildings condemned and torn down		2
Cost of operating department 1911		$16,300.66
Revenue of department, permit fees		$12,999.80
Rejected appeals		200
		$13,199.80
Cost of operating department 1910		$11,940.00
Revenue of department from permit fees		$10,203.00

Architectural Lecture Course

In June, 1911, the Portland Architectural Club declared a vacation for the summer months to enable the house committee to find the long looked for new quarters, which they did after much delay in finding suitable location within the means of the club. By the middle of July a new home was found at 247½ Stark street on the top floor of the old Sweeny Building, with the best possible arrangement for club quarters.

A competition was arranged by the class committee for a design to remodel the old rooms, which was open to all members of the club. This competition lasted two weeks and was awarded to Messrs. Dawson & Flanigen, who were instructed to start the work as a committee at once. Having an appropriation of $650 and many friends, the work started off with a bang. Estimates were received and the general public. The first lecture starts Tuesday evening at 8:30, January 9th. For those that may be interested in the work a list of the lectures and the dates is given:

January 9th, Egyptian Architecture, H. Goodwin Beckwith; January 16th, Greek (classical), John M. Hatton; January 23d, Roman, F. J. Burton; January 30th, Medieval, Folger Johnson; February 6th, Gothic, H. Goodwin Beckwith; February 13th, Renaissance, McDonald Meyer; February 20th, Modern, Frank Logan; February 27th, Civic Improvement; March 5th, Parks and Boulevards, E. T. Mische; March 12th, Landscape, H. E. Weed; March 19th, Concrete Construction, J. J. Burling; March 26th, Steel Construction, Wayne Mills; April 2d, Plumbing, W. Hays (inspector); April 9th, Illumination, F. W. Loomis, Seattle; April 16th, Electric Wiring, F. Weber (inspector); April 23d, Building Code, H. E. Plummer (inspector).

From time to time social stunts will be pulled off.

Christmas Party Given by the Portland Architectural Club, December 29, 1911

on part of the finish and the contract let to Nicolai-Neppach. The balance of the materials, such as brick, tile, painting, plumbing, flooring, electric wiring and fixtures, were donated in part by the generous friends of the club. To them the club is deeply indebted.

After a prolonged vacation the new quarters were formally opened Friday evening, December 8th, with refreshments and local exhibition. From the 9th to the 16th the exhibition lasted, being well attended during the days and evenings.

On the 16th of December the first beaux arts problem for class B was started, in which ten men participated. This class work will continue until January, 1912, under the careful attention of the class committee. Following the class work a series of lectures has been arranged for all the architects and draftsmen, together with their friends

The club plans to stage a play some time in June, parts having been written. Announcements of awards to various members will be made public in the near future.

The dates of the regular meetings have been changed from the first Tuesday of every month to the first Friday. This it is hoped will allow the younger men an opportunity to come out in greater numbers.

During the summer several trips are being outlined for the younger men to visit various plants and enjoy a different recreation than heretofore.

In conclusion the president earnestly requests all architects and draftsmen who are not members of the club to attend one of our meetings and get in touch with all who are interested in the spirit of architecture.

If the club can help you it is worthy of your membership. If you think it isn't, let it try to prove it.

PORTLAND ARCHITECTURAL CLUB
SOCIAL ROOM
Dawson & Flanigen, Designers

The Honest Competition Tolerated, But Not Sought by Mature Architects

It seems to be an accepted fact among ordinary people that read the newspapers that architects like competition, are in fact, always anxious to enter their skill against their fellow by working out a set of plans and submitting them to the judgment of the client. It is an impression that should be removed by architects whenever the opportunity offers. Not by abstaining from competitions, perhaps, though that would be the most logical as well as the most forceful method, but by explaining the true status. Every architect enjoys the stimulus of studying a new problem in design and this presents a temptation to compete when an attractive program is offered. Clients induce architects whom they have satisfactorily employed to enter competitions upon which they happen to serve as members of the building committee. Work in an office will get slack and an architect will make plans in a competition to keep busy, and then there is an ambition and the gambling spirit. There may be other reasons that influence the entering but there are none that, from a business standpoint, justify the speculative work involved. Competitions are decried by the ignorant or careless because some are judged by the incompetent or awarded through favoritism, but such cannot be classed as competition by honest men. In fact, this feature of honesty is the basis of competitions as it is in everything else, but to a greater degree. Without an honest purpose in the committee to procure the best building possible, and this involves laying their unskilled judgment aside and employing the best expert advisor possible, and a like honesty in each competitor, both in executing the design and in seeing that he wins or loses through absolutely fair methods, no competition is worth the name, and it is no honor to be connected with it either in winning or losing. When an equitable program is followed while the losing competitors pocket a financial loss entirely out of proportion with that won by the successful architect, there is no graft connected with its construction and the client received full service. A long and close study of the profession has shown that a dishonest architect cannot design. It is rare that he can hire skilled talent so that he can manipulate. So that in the properly conducted competition, the best design, and therefore the best man wins. The recent writer to the *Construction News*, who stated the contrary did not know what he was talking about. He neither knows architects (though he may have Mr. Wright's certificate that he is one) nor has he studied competitions. He knows something of the kind that can only be classed with the gambling games in which the cards are marked and the dice loaded.—*Western Architect.*

Ventilation of Moving Picture Shows

At a meeting of the New York Chapter of the American Society of Heating and Ventilating Engineers a paper was read relating to the necessity of ventilation in moving picture show places.

This is a question of such great importance to the community at large that it is surprising that more cities have not found it expedient to pass specific ordinances in regard to the ventilation of these places.

The only states that have specific laws in regard to this subject are Ohio and Kansas, while only two cities, San Francisco, Cal., and Chicago, Ill., have ordinances on the subject of ventilation .

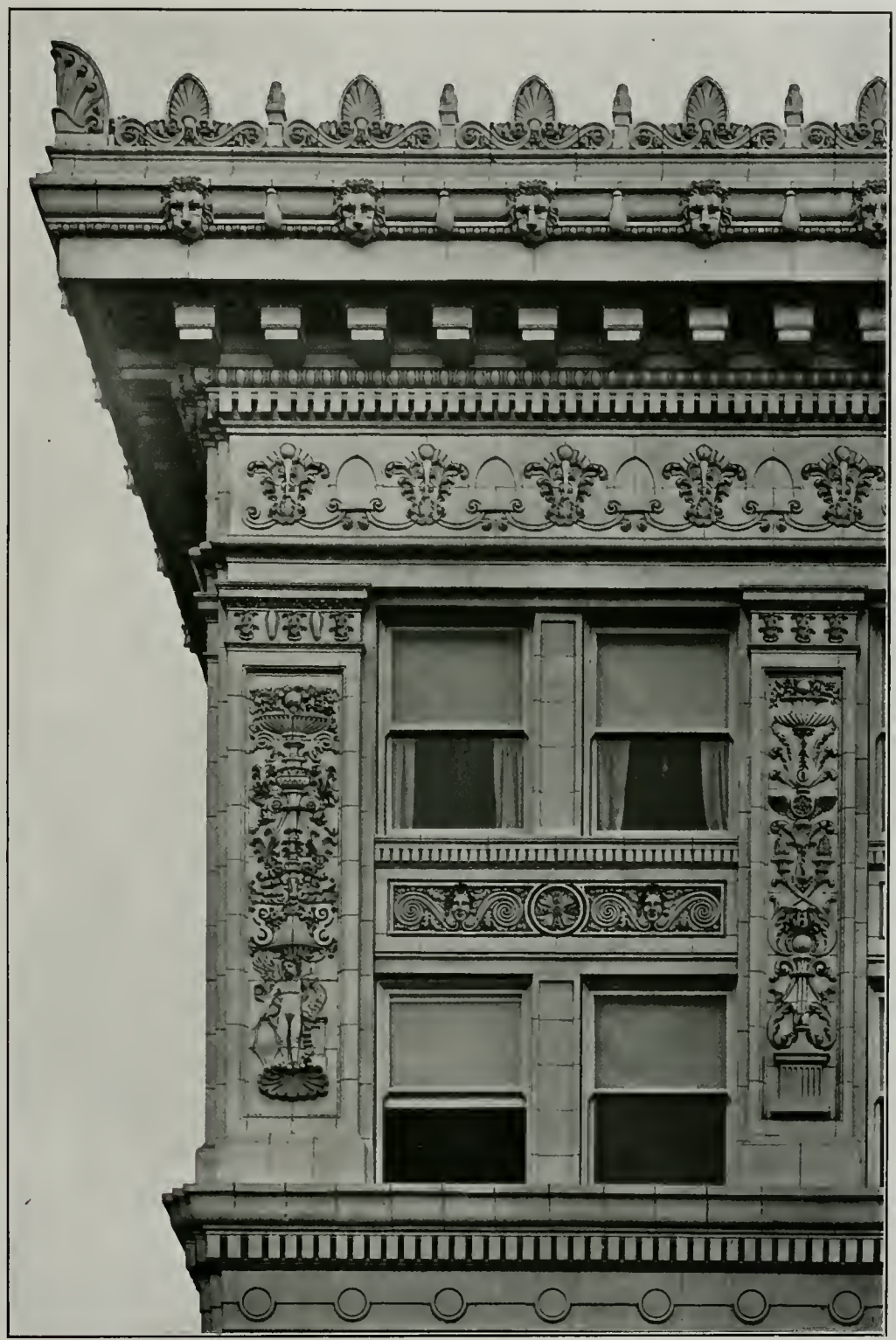
Letters received from different parts of the country show that this is the opportune time for legislation in regard to this subject, and we trust that the society will appoint a live committee who will push this matter vigorously.

Glazing Sewer Pipe

Only strong, refractory clays that will stand a high temperature are fitted for salt glazing. Though the process is simple, a number of experiments will doubtless be necessary before a satisfactory result is obtained. When the sewer pipe has been fired and the kiln is at its highest heat and the fire holes are bright and clear, a small shovelful of coarse salt is thrown into each fire hole. Some minutes afterwards the fire boxes are banked up with ashes or covered with tiles. In about an hour the process is repeated, and a trial taken from the kiln will show how the glazing is progressing. The salting is again repeated, if needed, and when the trial shows a satisfactory glaze the process is stopped. The kiln is then given a final fire to clear it and allowed to cool, which takes from 24 to 36 hours.—*Building World Z., 1910.*

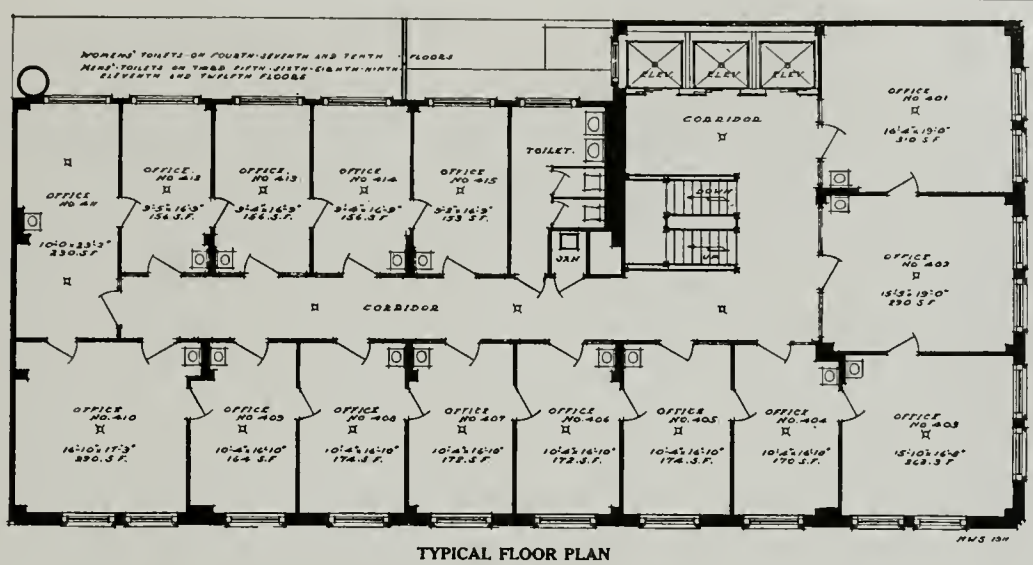
PORTLAND ARCHITECTURAL CLUB
DRAFTING ROOM, LOOKING INTO SOCIAL ROOM
Dawson & Flanigen, Designers

Elevation, Wilcox Building, Portland
Whidden & Lewis, Architects



Terra Cotta Detail, Wilcox Building, Portland
Whidden & Lewis, Architects

Terra Cotta Detail, Wilcox Building, Portland
Whidden & Lewis, Architects



TYPICAL FLOOR PLAN
(4th to 12th floors)

Wilcox Building
Whidden & Lewis, Architects

Terra Cotta Gargoyle, New High School, Spokane, Wash.
Mr. L. L. Rand, Architect

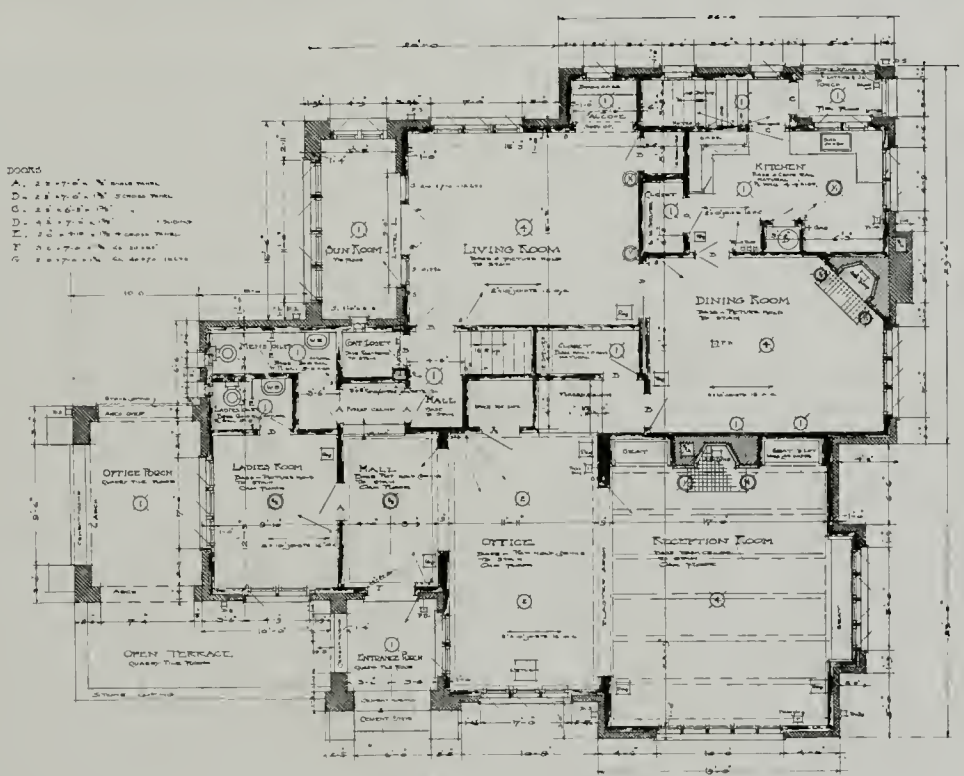
Terra Cotta Gargoyles, New High School, Spokane, Wash.
Mr. L. L. Rand, Architect

Elevation

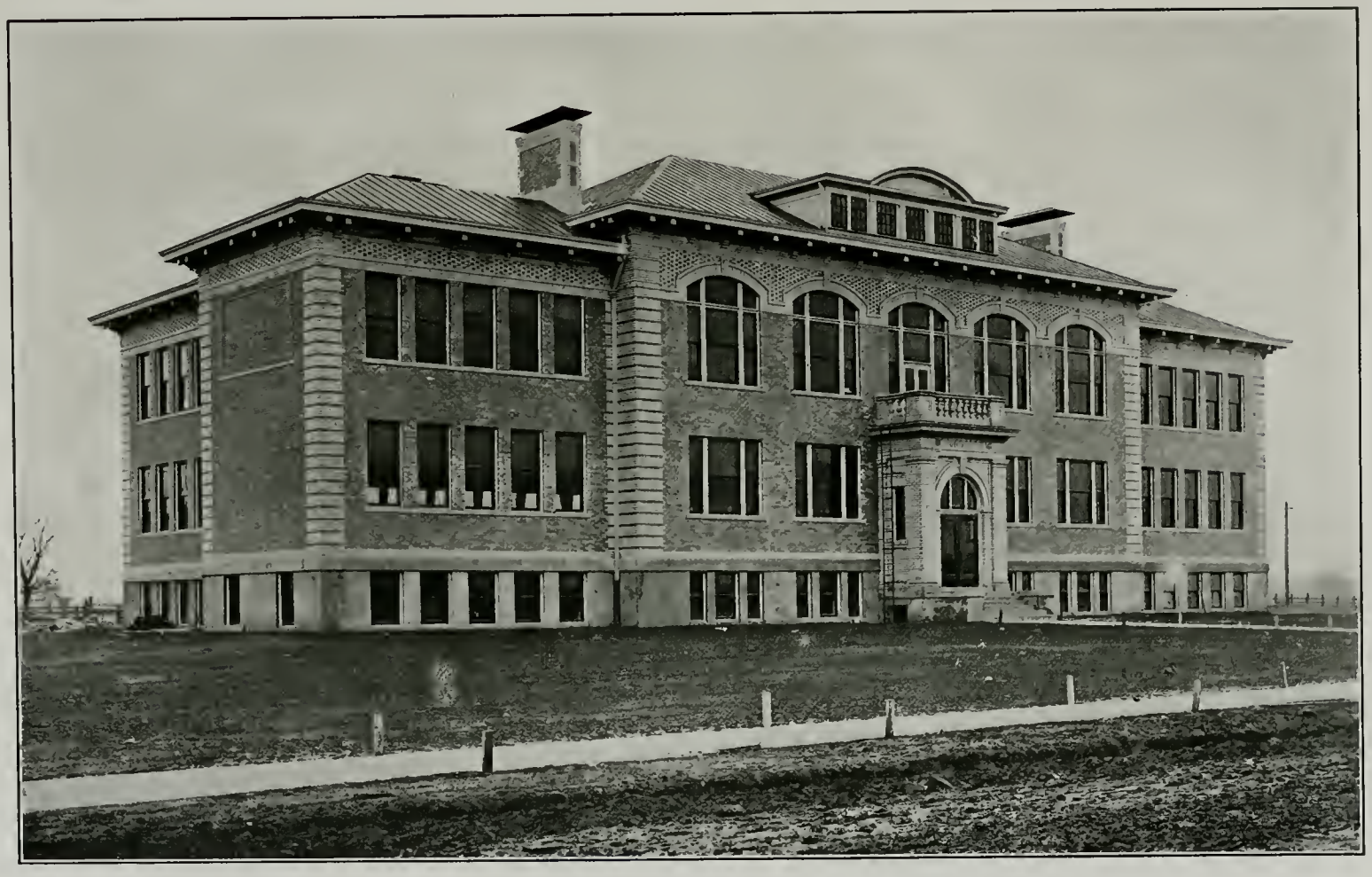
Reception Room

Superintendent's Residence and Office, Mt. Scott Cemetery, Portland
Mr. Ellis F Lawrence, Architect

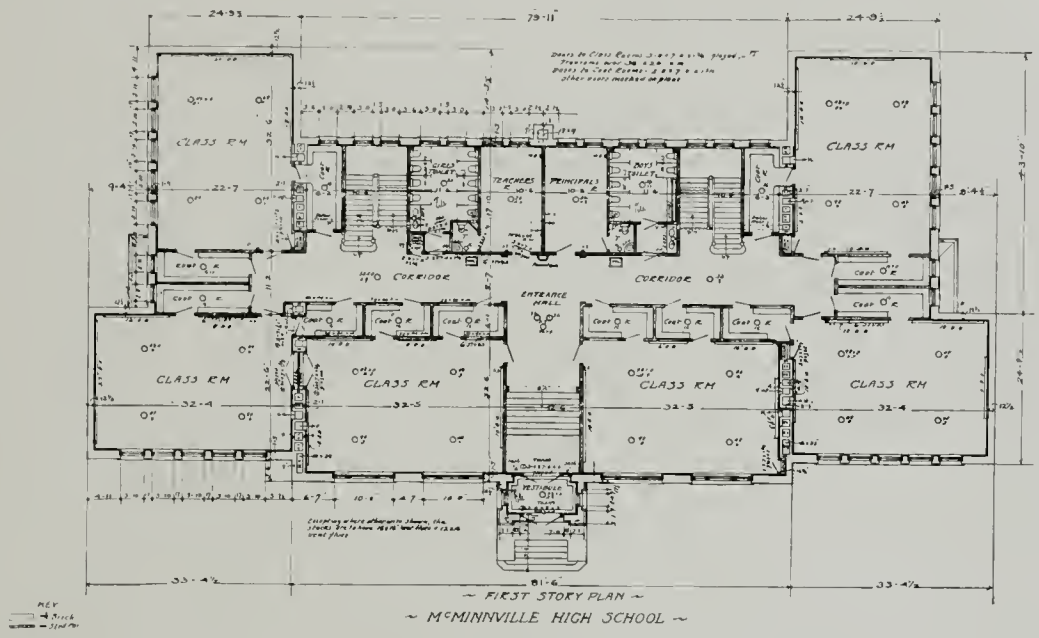
Elevation



First Floor Plan
Superintendent's Residence and Office, Mt. Scott Cemetery, Portland
Mr Ellis F Lawrence, Architect

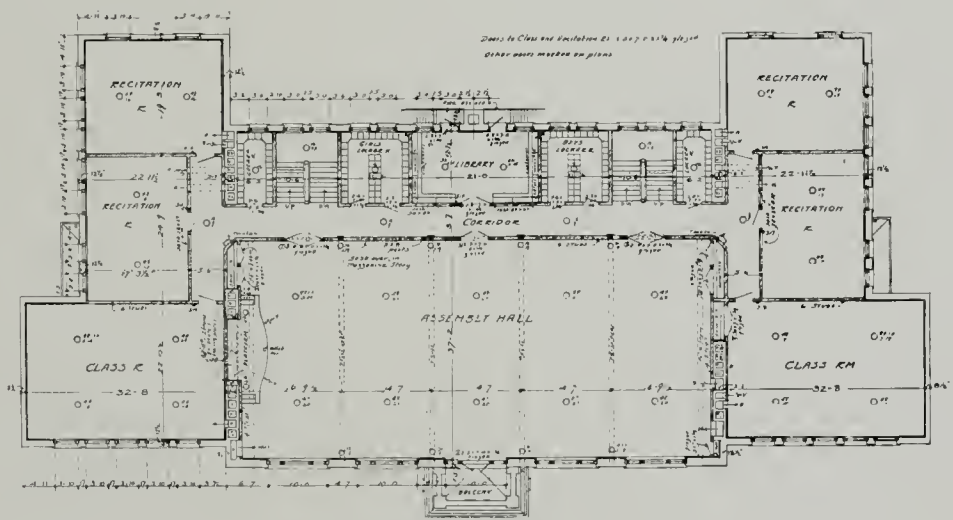


Elevation, McMinnville High School, McMinnville, Ore.
Kroner & Henn, Architects



~ FIRST STORY PLAN ~

~ McMINNVILLE HIGH SCHOOL ~



~ SECOND STORY PLAN ~

~ McMINNVILLE HIGH SCHOOL ~

McMinnville High School

Kroner & Henn, Architects, Portland, Ore.

PACIFIC COAST ARCHITECT
JANUARY, 1912

Knickerbocker Apartments, Spokane, Wash.
Mr. Albert Held, Architect

Trade Notes

Timms, Cress & Co. will furnish the Pedrara onyx for the Waldorf Buffet, Seventh and Washington streets, and the adjoining jewelry store. The Montana Amusement Co., Butte, Mont., have just finished the onyx on the Peoples' Theater Building on West Park street.

The Washington Brick, Lime and Sewer Pipe Co. will furnish the full glazed light cream terra cotta and red mission brick on the new Oregon Hotel, terra cotta facing on the Merchants' National Bank, terra cotta on the Mead Estate Building, Fernwood and Rose City Park schools, and the cream plastic face brick on the Shea Building.

The Denny-Renton Clay and Coal Co. of Seattle will furnish the terra cotta on the Journal Building, corner of Seventh and Yamhill streets, through their agency, the Western Clay Co. of Portland.

The Portland Tile and Mantel Co. has moved from 131 Eleventh street to 415½ Stark street.

The Parelius Manufacturing Co. will furnish all the fixtures in the new Lipman-Wolfe Building, Fifth and Washington streets.

Timms, Cress & Co. furnished the Hebron press brick on the Wilcox Building, the J. W. Cook Building, Third and Main streets, and the Albina water office.

E. L. Knight & Co., electrical contractors, formerly located at 183 Morrison street, have moved into larger quarters, being now at 291 East Morrison street. They have a large line of fixtures suitable for the most varied requirements, at right prices.

Western Refining Co., 351 East Oak street, has thoroughliy remodeled and enlarged its office.

The Washington Brick, Lime and Sewer Pipe Co. of Spokane, Wash., has furnished the terra cotta on the Wilcox Building through its local representative, Mr. C. T. W. Hollister.

The Pacific Face Brick Co. furnished the face brick on the McMinnville High School Building, Lincoln High School, the Smith Hotel Building, the Friese & Kramer Hotel Building, Tenth and Washington streets, and the Goode Estate Building, Sixth street, and will furnish the face brick on the Zirngiebel Building at Sellwood.

The Portland Wire and Iron Works erected the Marquise and installed the ornamental iron work on the new Wilcox Building.

The J. C. Bayer Furnace Co. installed the sheet metal work on the Wilcox Building.

We acknowledge receipt of a calendar for 1912 distributed by M. L. Kline, of this city, dealer in plumbing, steam and engineers' supplies, which is unique and convenient. Each date has an entire sheet to itself and the figures are prominent, adding much to its utility in an office.

December 15th the Portland local of the National Association of Sheet Metal Contractors held its annual meeting, electing the following officers: T. F. Meagher, president; M. H. Gunther, vice-president; J. E. Tilton, secretary; C. J. Burkhart, treasurer; J. C. Bayer, T. P. Maney, Charles McPherson, H. Hirschberger and H. E. Jaeckel, directors.

A matter that is handy to know is this: A fireproof cement that will close cracks in furnaces can be made of 75 parts of wet fireclay, three parts black oxide of manganese, three parts white sand and one part powdered asbestos.

The Portland Bar Fixture Co., 320 Yeon Building, will install the fixtures and bar in the buffet for P. H. Donovan to be built in the Merchants National Bank Building, Fourth and Washington streets, a 30-foot bar and fixtures for A. D. Jackson, Second and Yamhill streets, and the German silver work board in the Multnomah Hotel bar.

The Higgin Manufacturing Co. of Newport, Ky., has appointed the Lithic Manufacturing Co., 625 Yeon Building, state agent for the Higgin metal frame window screens. Since securing the agency Mr. Schiffer reports receiving the contract to install the Higgin all metal screens in the Villa St. Clara Apartments, Twelfth and Taylor streets.

The Lithic Manufacturing Co., 625 Yeon Building, laid the Raecolith floors and stairs in the new wing of the Blind Asylum, the Raecolith floors in the Deaf and Mute School at Vancouver, Wash., and the Raecolith stairs, treads and corridors in the new Fernwood School.

The Newberg Brick and Tile Co., 607 Board of Trade Building, has erected in their office a fireplace for demonstrating the appearance and finish of their new Newberg red "ruffled" brick.

The Newberg Brick and Tile Co., 607 Board of Trade Building, furnished the face brick for the fire station at Francis and Greenwood streets, and the new addition to the Gambrinus Brewery, Twenty-fourth and Washington streets, and a three-story building at Thirty-seventh and Belmont streets for J. M. Wallace.

The Columbia Elevator Co., 254 East Sixth street, is distributing a ten-year aluminium calendar. Have you received yours? If not, write or phone East 3857.

The Columbia Elevator Co., 254 East Sixth street, repors that its business for 1911 was beyond its expectations, and is starting out the new year with several large orders, having made extensive alterations and added a brass foundry, where it will be able to turn out ornamental brass and castings of all kinds.

The Washington Brick, Lime and Sewer Pipe Co. of Spokane, Wash., furnished the terra cotta on the new Wilcox Building, terra cotta and brick on the Knickerbocker Apartments and the gargoyles on the new Spokane High School shown in this issue.

Mr. Fred C. Cook reports having installed the Kawneer store front system in the Wilcox Building, and is now installing the same system in the Goode Hotel Building.

We call the attention of our readers to a series of articles to be published in the PACIFIC COAST ARCHITECT, written by Joseph K. Moore, assistant manager of the Western Clay Co. The initial article of the series—"Vitrified Brick in Building Construction"—appears in this issue. The other three articles which will appear in the regular order are: "Efficiency in Brick Work," "Reduction of Fire Risk by the Use of Brick," "Brick for Artistic Garden Walls." In this connection it is probable that we shall at some future time publish an article on the architectural possibilities of good brick work.

As an evidence of the advertising value of the PACIFIC COAST ARCHITECT we cite an instance. The Newberg Brick and Tile Co., of which Geo. H. Rodgers is president, is one of our esteemed advertisers. This company is now introducing a new ruffled face brick in various shades of red, which is attaining much popularity. A letter was addressed to Mr. Rodgers recently. The writer had forgotten his name and addressed the letter "G. H. 'Ruffles,'" but it landed in the right place. Great is the "horsepower" of printers' ink, and mighty is "ruffles" brick or "Ruffles" Rodgers, which are now synonymous.

Personal Mention

M. M. York, sales manager of the Pacific Face Brick Co., is reported on the sick list.

Architect A. E. Doyle, of Doyle, Patterson & Beach, is on an extended trip in the East.

Mr. S. C. McPherson, formerly with the Seattle office of the Western Building Material Co., is a new addition to the sales force of the local office.

C. C. Smith, sales manager of the Western Clay Co., was a recent visitor to Seattle on business.

M. V. Ward, manager of the Boise house of the W. P. Fuller Co., spent the holidays in Portland shaking hands with old friends and visiting the local office of the W. P. Fuller Co.

L. A. Spear, manager of the Washington Brick, Lime and Sewer Pipe Co. of Spokane, was a recent visitor at the local office, returning home via Seattle and Vancouver, B. C.

Mr. Barg, of the Barthold-Barg Co., spent the holidays in Seattle.

Mr. S. W. Coover, secretary of the Portland Concealed Bed Co., has returned from a two weeks' trip to Seattle, where he was called on account of the illness of his father.

Architect Bennes, of Bennes & Hendricks, is on a trip to California and expects to be gone about a month.

Architect A. C. Ewart is reported on the sick list.

Mr. R. F. Arndt, representing the Northwest Steel Co., is in Eastern Oregon on business.

W. B. Beebe, president of the Northwest Steel Co., is on an extended trip through the Eastern States and expects to be gone about a month.

Architect E. E. McClaran has returned from an extended trip through California and Old Mexico.

Mr. Thomas Bilyeu, of the Portland Concrete Pile and Equipment Co., is in California on business.

Architect R. E. Heine has returned from a trip to Eastern Oregon, where he has been inspecting a marble quarry.

Blaine R. Smith, manager of the Western Clay Co., is touring Southern California with his family and expects to be gone about a month.

Dr. Andrew Kershaw, of Willamina, Ore., vice-president of the Pacific Face Brick Co., was a recent visitor to Portland.

The Portland Concrete Pile and Equipment Co has moved from 514 Lewis Building to 500 Corcord Building.

C. W. Snidow, manager of the Perfect Concealed Bed Co. of Vancouver, B. C., was a recent visitor in Portland.

Architect Charles W. Ertz and L. F. Dole have formed a partnership, and the firm will be known as Ertz & Dole. Mr. Dole was formerly in the city building inspector's office.

J. F. Kable has moved his office to 302 Henry Building. He was formerly in the Board of Trade Building.

E. E. Gilmer has returned from an extended business trip through California.

Mr. William H. Flanigen, draftsman in the employ of Architects Whitehouse & Fouilhoux, this city, was recently called to Philadelphia. Instead of answering a call of illness, as was properly supposed, we are pleased to announce that Mr. Flanigen was united in marriage December 28, 1911, in the Quaker City to Miss Edith Morgan. Mr. and Mrs. Flanigen are making Portland their home. The PACIFIC COAST ARCHITECT extends its congratulations.

Architect A. E. Harvey has moved from the Hamilton Building to 319 Failing Building.

A Resume

Recent items selected from the Daily Advance Reports of The Pacific Coast Architect.

PORTLAND.

Bank Building—Architects Parker & Banfield prepared plans for an addition to the First State Bank, at Gresham, Oregon.

Colonial Residence—Architects Roberts & Roberts prepared plans for a two and one-half-story terra cotta block residence on King Heights.

Church—Architect H. M. Fancher prepared plans for a modified English Gothic church building, to be erected on East Sixth and Multnomah streets, to cost $20,000.

Colonial Residence—Architect Charles W. Ertz prepared plans for a two-story, six-room colonial residence, to cost $5000.

Hotel—Architects Jacobberger & Smith prepared plans for a five-story pressed brick hotel building, to be erected on Seventh and Madison streets, at a cost of $50,000.

Church—Architects Whitehouse & Fouilhoux prepared preliminary sketches for a church and rectory, to be built at Oregon City, by the St. Paul Episcopal Congregation.

Stores and Apartments—Architect E. E. McClaran prepared plans for a two-story reinforced concrete store and apartment building, to cost $15,000.

Brick Barn—Architect George W. Foreman prepared plans for a two-story brick barn, to cost $10,000.

Woman's Union—Architects Whitehouse & Fouilhoux prepared preliminary plans for a six-story reinforced concrete building for the Portland Woman's Union, to cost $160,000.

Business Block—Architects Parker & Banfield prepared plans for a two-story brick business building, to be built at Gresham, Ore., at a cost of $10,000.

Residence—Architect E. E. McClaran prepared plans for a seven-room, two-story frame residence, to cost $4000.

Remodeling Hotel—Architect Aaron H. Gould prepared plans for the remodeling of the Hart Hotel.

Stores and Apartments—Architects Roberts & Roberts prepared plans for a two-story frame construction flat and store building, to cost $7500.

Garage—Architects Roberts & Roberts prepared plans for a one-story brick garage, to cost $10,000.

Machinery Hall—Architects Claussen & Claussen have prepared preliminary plans for a seven-story reinforced concrete building, 200x200 in size, to cost $500,000.

Stores and Apartments—Architect Clair H. Bristow prepared plans for a three-story brick store and apartment building, to cost $17,000.

Bungalow—Architect E. E. McClaran prepared plans for a $4000 bungalow, to be built in Beaumont.

Remodeling—Architect W. W. Oates prepared plans for the remodeling of the Quelle, at a cost of $8000.

Apartment House—Architects McNaughton & Raymond are preparing plans for a five-story brick apartment house, to cost $60,000.

Garage—Architect H. L. Camp prepared plans for a two-story brick garage, to cost $15,000.

Store and Hotel Building—Architects McNaughton & Raymond are preparing plans for a four-story brick store and hotel building.

Residence—Architect Frederick S. Allerton is preparing plans for a seven-room residence, to be built in Irvington, at a cost of $4000.

OREGON.

Fraternity House—Corvallis. Architect Clair H. Bristow is preparing plans for a two-story, fifteen-room fraternity house, to cost $12,000.

Garage—Eugene. W. J. Warnock is building a two-story brick garage, 80x110.

Cold Storage Plant—Hood River. H. F. Davidson, of Hood River, is building a concrete cold storage plant, to cost $15,000

Court House and Jail—Klamath Falls. The county court is having plans prepared for a $200,000 court house and jail.

Lodge Building—Albany. The Knights of Pythias are having plans drawn for a $50,000 building.

High School Building—Roseburg. A bond issue has been voted and a site selected for a $35,000 high school.

Store Building—Cottage Grove. A. S. Powell and W. B. Cooper are building a two-story brick store building.

Business Block—The Dalles. Architect J. C. Crandall is preparing plans for a seven-story brick business building.

Library Building—Oregon City. Work will begin soon on a $12,000 library building.

Church Building—Medford. Architects Power & West are preparing plans for a $10,000 church building.

SEATTLE.

Market Building—Architect Harlin Thomas prepared plans for a three-story brick building, to cost $20,000.

Warehouse—Architects Robb & Mendel prepared plans for a three-story reinforced concrete warehouse building, to cost $45,000.

School Building—Architect Edgar Blair was commissioned to prepare plans for a two-story brick school building, to cost $50,000.

Hospital—Architect J. C. Cote prepared plans for a three-story brick and concrete hospital, to cost $40,000.

Church—Architect A. Dudley prepared plans for a brick church building, to cost $10,000.

Apartment House—Architect C. A. Brietung prepared plans for a three-story brick apartment house, to cost $45,000.

Apartment House—Architects Quandt & Creutzer prepared plans for a four-story brick apartment house, to cost $60,000.

Y. W. C. A. Building—Architects Gould & Champney prepared plans for a six-story reinforced concrete building, to cost $400,000.

SPOKANE.

Office Building—The Western Empire Insurance Co. have had plans prepared for a seven-story brick building, to cost $200,000.

Office Building—Volney Williamson has plans prepared for a ten-story office building, to cost $250,000.

High School—Architect Robert C. Sweatt prepared plans for a $80,000 high school building.

Hotel Building—The Inland Securities Co. have had plans prepared for a seven-story brick hotel building, to cost $150,000

WASHINGTON.

Hotel—Centralia. John Galvin has prepared plans for a three-story hotel building, to cost $100,000.

Club House—Snohomish. Architect Olof Hanson prepared plans for a two-story brick club house, to cost $15,000.

Asbestos Plant—Tenino. The Simplex Asbestos Co. is building a refining plant at Tenino, costing $12,000.

High School—Montesano. Architects Watson & Vernon prepared plans for a brick and stone high school building, to cost $60,000.

Yeast Plant—Sumner. Fleischmann & Co. had plans prepared for a yeast plant at Sumner, to cost $200,000.

Apartment House—Toppenish. George W. Casey had plans prepared for a brick apartment building, to cost $15,000.

Stores and Bank Building—Toppenish. Frank A. Williams had plans prepared for a brick bank and store building, to cost $40,000.

Hotel and Stores—Pasco. The Perfoot Hardware Co. is building a three-story brick building for store and hotel purposes.

Apartment House—Walla Walla. Dr. F. J. Roberts had plans prepared for a four-story brick apartment house, to cost $40,000.

Lodge Building—Winlock. The W. O. W. will erect a two-story brick store and lodge building, 50x100.

Office Building—Vancouver. The Clark County Abstract Co. are planning to erect a two-story office building, at a cost of $20,000.

Hotel Building—Auburn. Architect V. W. Voohees prepared plans for a three-story concrete hotel and store building, to cost $100,000.

Business Block—Wenatchee. Mrs. C. E. Lillis and Mill Bros. are planning to erect a three-story concrete block, to cost $60,000.

High School Building—Vancouver. Architect D. Nichols has been commissioned to prepare plans for an $85,000 high school building.

Bank Building—Hoquiam. The First National Bank is preparing to erect a two-story stone building.

BRITISH COLUMBIA.

Hotel Building—Sechelt. Architect Marbury Sommervell is preparing plans for a $1,000,000 hotel and sanatorium.

Theatre Building—New Westminster. Architects Gardiner & Mercer prepared plans for a six-story reinforced concrete theatre building, to cost $100,000.

Hotel Building—Victoria. Architects Breseman & Durfee prepared plans for a six-story reinforced concrete hotel building, to cost about $100,000.

Hotel Building—Vancouver. Architect F. H. Bender is preparing plans for an eight-story reinforced concrete hotel building, to cost $75,000.

Elevator Inventor Born in 1811

One hundred years ago August 3, there was born in the little town of Halifax, Vt., a man whose inventive genius led the way for the erection of the skyscraping buildings that now distinguish every American city, and incidentally added millions of dollars to the value of real estate.

The man was Elisha G. Otis. His invention was the elevator, undoubtedly one of the most important and useful inventions of the nineteenth century. Without the facilities offered by the elevator for reaching any desired height the tall buildings of today, it is hardly necessary to state, would be wholly impractical.

Otis began life as a farmer, but his inventive genius led him to turn his attention to mechanical pursuits. After engaging in various lines of manufacturing in Albany, Troy and one or two other places he finally located in Yonkers, where he was given charge of the erection of some buildings for a manufacturing company.

In erecting the buildings it became necessary to construct an elevator for use on the premises, and in connection with this Mr. Otis devised a plan to prevent the fall of the platform in case of the breaking of the hoisting cables. It was this safety device that brought the elevator into practical use.

Mr. Otis first demonstrated the safety and utility of his invention at the International Exposition held in New York City in 1853. Within a few years thereafter the elevator system was introduced into public buildings. The old Fifth Avenue Hotel, which was torn down only a few years ago, was the first to install an elevator and for a long time it was an object of much curiosity to the metropolis.

Mr. Otis lived to see his invention come into practical use not only in America but throughout a large part of the world. He established a factory for the construction of his elevators in Yonkers, where he resided until his death in 1861. While his name will always be inseparably linked with his invention of the elevator he was fertile in other lines of invention and improvement, among his products being a machine for making blind staples, an automatic woodturning machine, a steam plow, and a rotary oven for use in the making of bread.

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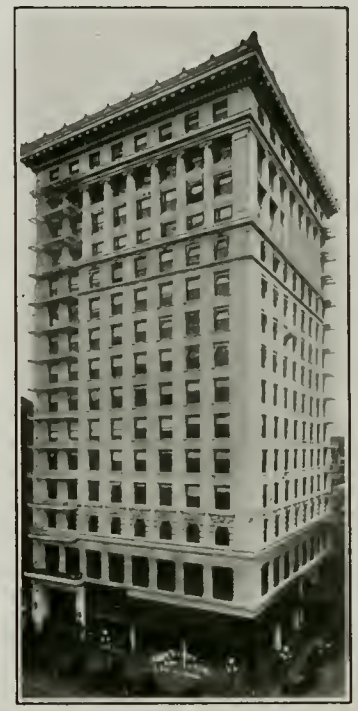

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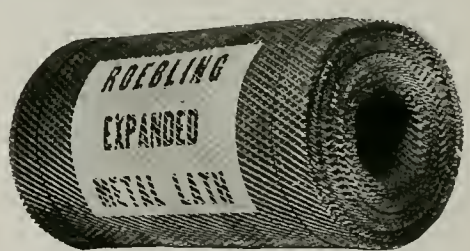

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VOLUME 2 FEBRUARY, 1912 NUMBER 5

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The Pacific Coast Architect

VOLUME 2 PORTLAND, OREGON, FEBRUARY, 1912 NUMBER 5

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RALPH I. THOMPSON, *Editor Advance Report Service.*

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Changes in, or copy for new advertisements must reach the office of publication not later than the Twentieth of the month preceding issue.

The Editor will be pleased to consider contributions of interest to the readers of this publication. When payment for same is desired this fact should be stated. Self addressed envelopes must accompany all such contributions.

ADVERTISING RATES ON APPLICATION TELEPHONE MARSHALL 236

Current Comment

There is apparently no cessation to the chorus of the hammer and the saw, which, in the hands of the master workmen, are building a city substantial.

Some persons, in attempting to build a character, like the Japanese carpenters, begin at the roof and build downwards, when they should reverse the process.

Polish and veneer to a man are like new paint on an old building. They do not eradicate faults and defects, but merely conceal them from view.

Prosperous business conditions are much like good health in the individual. Talk of them, live them, and they come to pass. Preach pessimism and illness and they come into being. It pays to be an optimist.

Some Comparative Figures

The building conditions of 70 of the leading cities of the country for December, as reported to the *Construction News*, of Chicago, presents an exceedingly interesting study in the matter of comparative statistics. The figures show in December, 1910, the total amount covered in these 70 cities was equal to $53,360,392. For the same month in 1911 the grand total was $46,250,209. The net percentage loss was 13 per cent. Interesting ourselves more particularly in Western cities, we find the following:

For December, 1911. Los Angeles figures show $1,431,525, as against $1,472,791, 1910, or a loss of 3 per cent; Portland Ore., $1,293,526 and $4,720,420, a loss of 73 per cent; San Francisco, $1,207,429, $958,758, a gain of 26 per cent; Oakland, Cal., $517,539, as against $420,612, a gain of 23 per cent; San Diego, $23,620, as against $277,850, a gain of 53 per cent; Pasadena, $199,914, as against $137,789, a gain of 46 per cent; Stockton, $103,772, as against $34,392, a gain of 202 per cent; Tacoma, $88,565, as against $111,703, a loss of 21 per cent; Salt Lake, $35,600, as against $240,300, a loss of 85 per cent.

Reed College Breaks Ground

After five years of preparation, ground was broken January 12th for the first Reed College buildings on the Campus of eighty acres in the City of Portland. The College will open next September in the permanent buildings, and on the endowment foundation of about $3,000,000, provided by Mr. and Mrs. Simeon G. Reed, of Portland.

This beginning is the culmination of a full year's work on the part of the President and the architects, Doyle, Patterson & Beach. Every college in the United States and Canada, notable for its grounds and buildings, has been visited. The trustees have anticipated the growth of a century, and embodied in the specific plans of the first buildings all the best ideas available. The contract for the first two buildings was awarded to the Sound Construction Company.

At the breaking of ground there was a brief and simple ceremony, in the presence of trustees, faculty, students, and friends. Dr. Thomas Lamb Eliot, President of the Board of Trustees, presided. Hon. Cyrus A. Dolph delivered the Commemorative Address.

For the opening of the College next September, three principal buildings, in addition to residences for the faculty, will be ready—the Arts Building, the Dormitory, and the Gymnasium. All the buildings will be in the Collegiate-Gothic style of architecture. The material will be Indiana limestone and mission brick. The Arts Building and Dormitory will be steel and concrete structures, fireproof throughout. The Arts Building is 257 feet long, with wings 85 feet long. It has four stories. The estimated cost of the building and furnishings is $225,000. The Dormitory, which is virtually five separate dormitories, contains a large club-room for men students, a dining-hall, and rooms and baths for one hundred twenty-five students. The cost of this building, exclusive of furnishings, is $140,000. There will be accomodations for women students, in charge of Dr. Eleanor Harris Rowland, who comes to Portland in September from Mount Holyoke College.

The Future in Mind

Architect Lawrence has given us the first of a series of lectures on the subject of city planning, and the one source of regret in connection with that lecture and those that are to follow is, that provision is not made for their general distribution, that the leaven of education on this important subject might be at work among all the people.

The emphatic point in the Lawrence address was the value of thought for the future, of intelligent, scientific and systematic thought, and then of adherence to the plans which that thought suggests. We may gather from what Mr. Lawrence said that all city building from this time forth should be with a city of more than 2,000,000 in mind; or we will find later on that we have built without economy and without the conveniences, luxuries and the business facilities that a city of modern construction should present.—The Evening Telegram.

The Craftsman's Work in City Planning

Ellis F. Lawrence, the well-known Portland architect, made an address January 28 at the Portland Museum of Art on "The Craftsman's Work in City Planning." The speaker expressed his regret that the founders and builders of Portland had lacked foresight in laying out streets too narrow, the establishment of an unsightly water front and the stripping of the hills of trees. The lecture was illustrated with lantern slides showing civic improvements in various American cities. The speaker paid his tribute to those public-spirited men and women who made possible the employment of E. H. Bennett, whose plans for a City Beautiful, if adopted, will do much to rectify early mistakes made in laying out Portland. Among other things, Mr. Lawrence said:

Notwithstanding the materialistic tendencies, dominating our national life the past two decades, a renaissance in the Sciences and the Arts has been evolving and with the accumulation of wealth, we like to think a greater altruism and a finer philanthropy is being developed. The movement shows no finer expression than in the Civic Revivals now taking form in our American cities, wherein is heard the cry for more thorough sanitation, for greater economy of administration and for better citizenship. The city plan is perhaps the greatest principle called for in the tenets of these revivals, for in its success is found the solution of manifold existing ills.

The great minds of our country have been organizing to crush out abuses in the moral and physical lives of our people, and in the conduct of our charities, our industries, our municipalities and our national government. As these fine public servants have gone about their unselfish work, struggling to make our national life cleaner and purer, giving our poor knowledge wherein to better their conditions, our youth, health and education, and our citizens more of happiness, there has been found a field of work for the architect and the workers in the allied arts, namely the creation of the city plan, and the execution of its intricate details.

The Civic Idea has gripped our American people, as it has our brothers in England and Germany, and it is not exaggeration to prophesy that we are, here in Portland, on the eve of a civic awakening, which if perfected in its organization, will mean ultimately no further duplication of endeavor, but a concerted effort to solve the utilities practically and beautifully. It will give our most humble and our most powerful citizens a common objective, and in daily work and service for their fellows will give more happy and satisfying lives. It will develop a public intelligence, keen enough to cope with the great problems of city government and, uplifting the moral stamina of the people, will create a Civic Life made grand by the magnitude and beauty of its achievements. From such fertile soil will spring the City Practical, and with it, because practicality and beauty should go hand in hand, will grow the City Beautiful.

At first thought it would seem that the concentration of great masses of people in limited areas is contrary to the laws of nature. The fact remains, however, that such a movement has been growing steadily these past hundred years.

Chicago in seventy-five years has grown from a village of ten buildings to a city of two and a quarter million inhabitants. At the close of the Civil War only three per cent of our population lived in cities, now twelve per cent live in New York, Chicago, Brooklyn and Philadelphia alone, and the recent census shows that forty per cent of the entire population of this country today live in cities.

In Scotland in the early part of the nineteenth century one-quarter of the population were townspeople. Now the proportion stands at three-quarters.

In view of these tendencies it behooves us to make ready for the ever-increasing influx to our cities, for nature rebels when air becomes foul, and with congestion comes increased mortality, debased morals, contaminated religion and law and a blinded art spirit.

Germany is perhaps the leader today in systematically improving the living conditions of its citizens. The reason is not so much an aesthetic one as it is one of self preservation and the conservation of human life, for Germany has found its army recruits from the cities steadily decreasing in physical and mental efficiency. England found this true during the Boer War and so did the United States in the Spanish War.

The corrective is the City Plan, for only a city well planned can give ample air, light, recreation spaces and healthful hous-

NANCY
Panoramic view taken from City Hall

NANCY.—Place Stanislas

ing. The City Plan is primarily utilitarian and is commercially vital, for without it traffic must be glutted and economical public improvements impossible. It is a thousand times more essential to build a city in accordance with a preconceived plan than it is a house, a garment or a piece of machinery, and few wise men attempt these without the services of an architect, a tailor or a mechanical engineer. This, then, is the problem in which the craftsman has a distinct work to accomplish.

A brief review of the work done in other localities will no doubt give a clearer grasp of the scope of the problem. A future lecture will, however, deal more in detail with this phase of the subject.

Nancy, near Strasburg, in the Alsace and Lorraine country, is one of the most satisfying of all cities in its various, yet simple and harmonious focal points.

The Place de Stanislaus, the plan of which is here shown, is approximately 300x380 feet in dimension, while it is about 1000 feet from the Arch to the Palais du Government.

Paris is too well known to need description. It is the most beautiful city in the world today. Its people are happy and prosperous. It develops the best product of civilization—L'homme le travailleur—"man the worker." Its people love liberty, and when necessary they fight for it, but individual rights sink out of sight where the common good is concerned. Even the appearance of one's home is controlled by legislation in the interests of harmony, and the city as a result reaps millions each year from tourists who are drawn there mainly by its marvelous beauty and its art treasures.

Germany has been mentioned as a leader. The state compels municipalities to own land for improvements, and the recognized policy is to lose no opportunity of purchasing land for such. Prepared building schemes are the rule. If it is advantageous to deal with areas as a whole, although belonging to different owners, the municipality can combine them into one piece and then re-apportion, as it will thus control the development along sane lines to the welfare of all.

The city of Ulm owned eighty per cent of its area in 1906; naturally it controls its municipal improvements. The city controls land speculation by reserving the right to buy back land within 100 years at the price at which it was sold, and to prevent overcrowding, legislates that in the outlying districts only twenty per cent of the area can be covered by buildings, and devotes seventeen per cent to streets, thirteen per cent to back gardens and fifty per cent to front gardens.

Mannheim divides its area into three zones. The first district allows 60 per cent of the area to be covered by buildings, height limit of five stories. The second district allows fifty per cent for buildings and limits the height to four stories, while the third district allows but forty per cent for buildings and limits the height to three stories with spaces between all structures. Factories are restricted to special districts.

The city of Frankfort allows its municipal authorities or one-half of the property owners to start improvements and divides its area into three zones similar to Mannheim. These cities are mentioned to show the resulting advantages of proper legislation, in which the craftsman, as well as all other citizens, must participate.

Work in England has been mainly done in the form of industrial villages and garden cities. Ideal places to live in are the garden cities of Letchworth, Port Sunlight and Bournville. The commercial value of such villages has been proven by the experience of the Lever Bros., who laid out Port Sunlight around their soap factories and by the Cadbury's near their cocoa and chocolate plant in Bournville.

Chicago has had a growth averaging 65,000 yearly for the past forty years. It has a Burnham and Bennett plan. The need of such a plan was inspired by the great World's Fair about twenty years ago, but congested thoroughfares and mis spent millions made the citizens demand a carefully studied foundation for any future building. Their campaign is directed by 328 business men, representing all interests. They believe that "the characteristic of greatness is wisdom to anticipate the future while conserving the present," and we find quoted in the popular edition of their report the following: "An individual never attains any great size mentally nor morally except as he attaches himself to a great idea, and that idea being worthy grows with him until the stature of the man becomes equal to the stature of the idea to which he has attached himself."

Their scheme includes a system of outer roadways and highways encircling the city making direct connection between residential districts:—

diagonal and radial streets to relieve congestion:—

greater park and forest areas to purify the air and improve the health of the citizens.

a beautiful lake front for recreation and a foreground as it were to the city:—

civic centers for economical conduct of administration and nuclei around which civic pride will center:—

logical transportation lines and centers.

During the last twenty-five years the people of Chicago have spent $220,000,000 on supposedly permanent improvement, but millions upon millions of this amount have been wasted through haphazard methods. A city plan is then a business necessity, and in the struggle for obtaining this plan the citizens of Chicago became the leaders in settlement work and in community development about the parks. We find there a very sincere and virile School of Art, a promising feature of which is its ignoring precedent of the past and its struggle to evolve a logical and true expression of our national life.

I dwell at length on Chicago, for its plans are most comprehensive and promise most for success.

New York, like Portland, was laid out on the gridiron plan, and is struggling against past mistakes so serious in older portions of the city that there seems little hope of correction. It is building wiser in the newer districts under the check of a splendid Art Commission.

Washington, thanks to the foresight of Washington and Jefferson and the French architect, L'Enfant, is the best planned of our American cities. After ignoring it for years, the original plan has been resurrected as still being the best solution of the problem. Under a commission of experts, Burnham, Olmstead and St. Gaudens, and under the guidance of the American Institute of Architects, it is in fact becoming one of the most beautiful cities in the world.

Cleveland, by wise legislation, has made the best showing of any American city in a complete civic center at its very entrance gate. Their success has been achieved principally in my judgment, by the wise laws which enable any city in Ohio to condemn not only the property necessary for the contemplated improvement, but also the abutting property, thus recouping itself on the resale, by the increase in the valuation of the property. This principle is known in legal parlance as excess condemnation.

This method is also employed in Paris, and we find there such improvements as the construction of the Avenue de l'Opera executed at an actual profit to the city. We find the same principle in a Connecticut law establishing a commission for Hartford. This commission may take any amount of land for improvements that it desires; that not needed may be legally resold. A portion of the act reads as follows: "With or without reservation concerning future use and occupation of such real estate so as to protect public works and improvements and their environment, and to preserve the view, appearance, light, air and usefulness of such public works.

St. Louis, through its great Civic League, has stimulated its citizens to great improvements in parks and civic centers. Its brochures on the details of the city plans, such as billboards, street lighting, parks, transportation, etc., are invaluable to their citizens and the city planner. The report of the League says, among other things, the following: "The advantages to be gained from the adoption of a comprehensive scheme are several; it will give due importance to each field of municipal improvements; it will furnish a nucleus around which public sentiment can crystallize; it will help to realize the unity of our civic life by bringng together dfferent sections of the city; but more than all else, it will tend to bring civic orderliness and beauty where otherwise will continue to exist a lack of unity and an absence of dignity and harmony.

"The committee, when it first undertook the investigations embodied in this report, was animated by a theoretical belief in the value of civic centers, and by an ill-defined feeling that such institutions would tend towards the development of better citizenship. A more careful study of existing conditions, however, has convinced us that these institutions are absolutely essential factors in the wholesome development of a large city of today. The indiscriminate herding together of large masses of human beings ignorant of the simplest laws of sanitation, the evils of child labor, the corruption in political life, and above all, the weakening of the ties which bind together the home—these are dangers which strike at the very roots of society. To combat them the government must employ every resource in its power. Schools and libraries, playgrounds and public baths, by developing their minds, training their bodies and upbuilding the character of a people, furnish the foundation upon which a nation's welfare depends.

"The American people are determined to have more comfortable and attractive surroundings, and in the migration toward urban centers they are going to seek homes in those cities

where civic orderliness and comfort prevail to the highest degree." They are getting their city ready accordingly.

Boston has taken the lead, especially in park work. It has already about 15,000 acres, while we, here in Portland, have but 500. Based on the Boston standard, our park area is sufficient only for a population of 50,000 people.

Los Angeles has a Robinson plan and a five-year program, comprising the completion of parks and boulevard system, Union depot, municipal docks and warehouses, and the Public Library building, beautifying of harbor, and Owen's River Aqueduct, costing $24,000,000.

Manilla, San Francisco and Minneapolis have Burnham Bennett plans. St. Paul has used the architect, Cass Gilbert; Denver, the sculptor McMonies; Seattle, the engineer Bogue; Baltimore and Grand Rapids, architects Carrere and Brunner.

These experts recommend in the case of Grand Rapids, where the streets in the business center are congested, that laws be enacted, permitting owners to build fifty-one feet higher by moving back seventeen feet from the property line, thus eventually widening what is now a sixty-four foot street to ninety-six feet.

San Diego has had the benefit of studies made by Nolen, a well-known landscape architect; New Haven, by Olmstead and Cass Gilbert, and Hartford, by Carrere, the designer of the New York Library.

Philadelphia is most courageous. Already it has taken the initial steps to carry through its congested business district a beautiful artery connecting the City Hall with Fairmont Park.

Scores of other cities have been at work inspired by the same spirit that made Pericles and his Athenian fellows beautify their city to such perfection that for 2000 years we have paid tribute to their art treasures.

The need of the city plan, systematic, logical and precise, has created a demand for trained civic architects. Liverpool and Harvard Universities have formed new courses to fill the requirements, while other architectural schools are following. The result is a small group of specialists, great in genius and experience, men of wide travel combining the precise and analytical view point of the engineer with the creative instinct, and the sense of beauty of the architect. To such men with big, broad, unbiased visions must the layout, the skeleton, the big arteries and the focal points of the city be entrusted. It is for the citizens, the architects and the craftsman to see that the details are truthfully dealt with.

Someone has said that "A forced familiarity with ugliness dulls a taste for beauty, but the constant presence of beauty in utility brightens the aesthetic, civic and moral tone of the entire population," and here in a nutshell is the work of the craftsman in City Planning.

Modern short cuts in labor-saving devices and cheap imitations of substantial materials have been in the past depriving our modern craftsmen of their legitimate opportunities. Carving is too often pressed; stone cornices are too often metal; marble is too often scagiola. Ornament is turned out by machinery instead of by hand, or it is of baked clay instead of being executed in stone. Stone and brick buildings are often but veneer. Skeleton construction is masked by walls appearing to be bearing walls. These things are false, expressing neither true art spirit or the individuality of the designer. However, with the increase of culture, of appreciation of things beautiful, has arisen a demand for craftsmen in plants, formerly running wholly on a commercial basis. It has been found to pay. Buyers are no longer satisfied to purchase merely durable products. They must have some character, and the factories giving this touch to their goods, are the successful ones.

Tile is no longer confined to red, white and green. It is appearing in soft tones and blends, and offers each year, new textures and colors. The craftsman's hand is here seen, as it is in soft glazes now produced in terra cotta and in finely modeled and colored garden and other decorative pottery.

Many shops are devoting themselves wholly to art tiles and some of their wares are extremely beautiful in color, texture, design and composition. Stone men are finding a demand for good carving. The demand is making, in many cases, the artisan into the artist. Planing mills find they have to have a corps of wood carvers. The pressed work of ten years ago is no longer salable. The manufacturer of brick, to keep apace with the demand of his clientele, has to produce a brick of tapestry effect in texture and color, and must depend on the craftsman to produce the desired effect.

In metal works men are at a great premium who are students of ornament and of modelling, coloring and enamelling of metal alloys. Hand work is being sought for in contrast to machine work. Mantel hoods, light fixtures, hardware and even household utensils show the beneficial effects. Attention is being paid to the design and execution of light standards and electroliers, drinking fountains and trolley supports.

Even structural mediums are being studied along these aesthetic lines. Structural steel is fabricated especially in Germany and France in attractive shapes for ornamental uses. Concrete is being decorated by casting in its surfaces well-thought-out designs in relief or in colored tile inserts.

Bill boards are being curbed in size, color and subject matter. Artistic signs are called for, and what has been a public nuisance will some time become a legitimate business. Glaziers are employing designers and craftsmen to execute the art glass now called for in nearly all modern homes. Especially in wall paper, textile and furniture factories has the craftsmens' field been growing and the past decade has seen striking advancement in the design of wall coverings, carpets, tapestry hangings and furniture.

Even paint manufacturers and department stores are using decorators to move their goods. In all this the architect might be compared to the old abbot in the Gothic days who conceived the plan of the cathedral and left to the whim of the workman the execution and design of all details. The architect of today creates the plan and indicates the treatment and scheme for ornamentation and decoration, but he must depend on the work of another man's hands and heart, if his details are to be raised above mere mediocrity.

Upon all these details making up the planning of a city, the craftsman must stamp the spirit and record of his time. They should be a lasting record of our history and into them should be written simplicity, truthfulness and the highest grade of workmanship.

Mr. Irving K. Pond, president of the American Institute of Architects, has expressed these thoughts admirably in his recent article on "Art and Individuality." He says in part: "Humanity is so constituted that the only art which lives, to bear its record of a life or of a civilization, is the art which does beautifully those things which find sympathetic response in the higher nature and instincts and reflects the finer characteristics of the individual and the race. 'Art for art's sake' is quite of a piece with that 'virtue which is its own reward.' There is no virtue in that art nor art in that virtue, which is practiced in a closet or in a desert or remote from human contact, and has not in its intention and design the idea of carrying a message of beauty or of helpfulness to the neighbor and through the neighbor to the community. In the practice of art as in the practice of virtue, something is to be considered besides the thing or the deed, someone is to be considered besides the practitioner only.

"That something is the upward striving instinct in humanity—that someone is the individual, the community, the race. —So let us thank fortune that our own individual problem has been given us to solve in our own individual way and let us realize that it is a problem which is worthy of a solution that shall stand as a clear, clean-cut page in the world's history of achievement, and thank fortune if we have, and if we have not, pray fate to send us men of spirit, of intellect, of heart and understanding, men attuned to the message of the world soul who shall interpret justly and fully our age to coming time."

There are four other important fields of the craftsman's influence in city planning that are worthy of study. In the trade unions where the members could be educated to the appreciation of craftsmanship possessed by the ancient trade guilds founded upon the same basic principles as the present unions. It fell to the members of these guilds to perfect their various trades and the artist in their ranks was the most honored of the band:—

In the community centers, as they develop around our parks, schools and libraries and in the settlement club houses and homes where classes should be formed in manual training, weaving and other useful arts, exhibits of the work of the master craftsmen should be brought close to the people to familiarize them with beautiful forms and color:—

In the home—the most important of all—surround the children with beautiful, useful things. Train them to understand the great laws of beauty and to use their hands and hearts in their work with looms, tools, colors and clay:—

In wise legislation to correct existing laws which make public improvements nearly impossible. "Excess condemnation," which has been mentioned, is worth investigating, for it has been successful in other countries and states. Nothing could be more helpful in the condition of rapid growth we are now in than a legalized Art and Building Commission on which the craftsman would be invaluable. Such commissions exist in many American cities, among which are Boston, New York,

Denver and Los Angeles. Location of city monuments and buildings, as well as their design, should come before such a Commission for approval before permits are issued. John Belcher, a famous English architect, has said: "If legislation is necessary on sanitary matters that the public may be protected from insidious poisons conveyed through the senses of smell and taste and touch, may it not be equally important to protect the sight? Environment insensibly influences the development of all forms of life, and it cannot be doubted that the squalid conditions, horrid forms, inharmonious colors and injurious sights amongst which such a large proportion of our urban population spend their lives, contribute their quota to the sum total of degenerate moral tendencies, of which recurring acts of crime are the inevitable outcome."

Let us, as citizens of Portland, here and now examine our account. The books will show our obligations, our assets and our debts. They will show our solvency and they will show wherein we have been faithful or unfaithful to our trust.

On the ledger we find ourselves credited with having received from the Master of the universe, a really ideal site for the perfect city, topographical conditions, if made use of, giving variety, beauty and economy of all civic functions.

The debit side shows we have adopted a gridiron plan with short blocks, no alleys, narrow streets. We have disregarded the old natural trails leading into the city and have carried our tiresome straight streets on over hill and dale, cutting here and filling there.

Often through haste in bringing new additions on the market we find these straight streets failing to meet the streets of abutting additions. The results are such inexcusable kinks as we find in Hawthorne avenue, which should be one of the main boulevards of the city.

We are credited with a beautiful waterway, feeding into our midst the produce of millions of fertile acres and forests. The commerce of the world is at our doors, but the debit page shows our river front a thing to ridicule instead of a thing to praise—a thing of beauty. Our docks are antiquated; our bridges of ugly design.

We are credited with possibilities of a beautiful approach to the city, but we find no entry showing that we have other than unattractive setting to our stations and impossible arteries leading to them.

Nature's gifts of fertile soil, trees and plant life are plenty on the credit side of the books, while the debit column shows the denuding of our hills, the natural background of our city, stripping them of the noble firs, gashing their sides with fiendish cuts instead of following the natural contours which even the animals have laid out for us.

The credit sheet tells of unexcelled prosperity. The debit sheet slow philanthropy. We are credited with a golden opportunity in the grouping of public and semi-public buildings about to be built, Library, Auditorium, Municipal Building, Armory, Union Station, Postoffice, School Houses, etc., the same opportunity Cleveland made the most of. We are debited with proposed locations for some of these buildings fitting into the city plan regardless of their proper relationship to each other or future improvement of the city.

But finally, we find a glowing entry on the debit sheet. It tells of the fine citizenship of some 200 men and women who made it possible to employ a civic expert, Mr. E. H. Bennett, to study our city and to lay it out on paper ready for 2,000,000 people. It tells of the wonderful results of this study. It tells of the organizing of the Greater Portland Plans Association which will finally bring to its ranks every right-thinking man, woman and child in the city. It tells of the widening of Sandy Road and its possible extension and the location of the Postoffice according to the Bennett Plan. There will soon be posted the earnest endeavors of this Plans Association in widening Burnside street and in locating the Union Depot and other improvements, according to Mr. Bennett's recommendations. The publication in a popular edition of the Bennett Plans will soon be ready.

Portland, according to its charter, can have a legal bonded indebtedness of about $20,000,000. It has now about $11,000,000. Its average bonded indebtedness per capita is but $48 based upon an assumed population of 230,000 people. The average for the 16 leading cities of America is $73.22. We will never be in as good a condition to carry out improvements as now and the longer they are postponed the more they will cost.

With help of the citizens the Greater Portland Plans Association will endeavor to balance the books and make Portland true to its trust.

Washington State Chapter, A. I. A.

The regular monthly meeting of the Washington State Chapter, American Institute of Architects, was held at the Seattle Athletic Club Wednesday, February 7, 1912.

Mr. T. L. Quigley, the president of the Seattle Real Estate Association, was present as guest of the chapter and explained a proposal made by his association to form a "Garden Club" for the planting and otherwise beautifying the vacant lots throughout the city. This movement, it was explained, had been initiated by the National Real Estate Association and had been successfully applied elsewhere by the united action of different local organizations. Similar work could be done in Seattle, and the chapter was asked to co-operate by sending delegates to a general meeting called for the purpose of forming a suitable organization. Mr. Quigley's remarks were favorably received and the chapter referred the question to the committee on civic design.

Mr. C. F. Gould, the chapter's delegate to the institute convention, gave an interesting account of his trip and details of the convention proceedings, supplementing his formal report made at the last chapter meeting. Mr. Gould spoke particularly of the amount of constructive work accomplished, the unanimity and friendliness displayed by the delegates from the different sections of the country, the vital effect of these conventions on the welfare of the profession, and expressed a hope that we would never fail to send a delegation.

Mr. J. F. Everett in reporting for the legislative committee read some correspondence with the mayor of Seattle relative to a recommendation in the mayor's annual message that plans for city buildings be prepared in the office of the superintendent of buildings. It was voted to have the committee prepare a resolution expressing the chapter's attitude on this question and report at the next meeting.

Mr. James E. Blackwell, chairman of the committee on contracts and specifications, submitted his committee's report on the contract forms recommended by the institute. The aodption of these documents was recommended with slight changes proposed to make them conform to our local conditions. The report showed thorough and painstaking work on the part of the chapter committee, and was unanimously adopted with instructions to make the changes proposed after conferring with the chairman of the institute committee, the secretary of the chapter to get definite orders for these amended forms from the chapter members as a basis for placing an order with the institute printer.

Portland Has 160 Concrete Buildings

Robert S. Edwards, who is considered a good authority upon cement, states that in 1910 there were consumed in Portland 1,200,000 barrels of cement in construction work, and it is his opinion that the figures for 1911 will surpass this total. Continuing along these lines, the United States Department of Agriculture recently published certain statistics gathered by the Geological Survey in regard to the construction of reinforced concrete buildings in a number of cities of the United States. From these figures we glean the following information:

Chicago has 542 reinforced concrete buildings, valued at $6,626,000; Portland, 160, $3,670,000; Seattle, 24, $2,062,000; Los Angeles, 24, $1,781,421; St. Louis, 176, $3,103,138; Philadelphia, 28, $2,100,000; Detroit, 38, $1,209,500; St. Paul, 50, $1,084,392; Boston, 31, $1,031,443; San Francisco, 17, $786,000.

New York City is not even mentioned in the publication of these statistics.

Portland in this showing stands well up in the front rank.

Written expressly for The Pacific Coast Architect

The Dallas-Oak Cliff Viaduct

By JEAN H. KNOX, Assistant Engineer of Portland Concrete Pile Co., Engineers and Contractors

The Dallas Oak Cliff viaduct connecting the City of Dallas, Dallas County, Texas, and its suburban city, Oak Cliff, was formally dedicated on January 14, 1912. The viaduct is of unusual magnitude and one of the longest structures of its kind in the world.

As engineer for the sub-contractors, the Gulf Concrete Construction Co., Houston, Tex., the writer was on this work during the work of placing concrete piles upon which the main superstructure rests. The data given here was obtained from plans and specifications, notes and from an article in the *Engineering Record* by Victor H. Cochrane, of the firm of Hedrich & Cochrane, consulting engineers, Kansas City, Mo.

The viaduct is 4778 feet between abutments and will be over 6000 feet from end to end, or more than a mile in length. The roadway is 44 feet wide between curbs, sidewalks 4½ feet in the clear, with a total width of roadway, curbs, sidewalks and balustrade of 53 feet. With the exception of the concrete piles the construction throughout is of reinforced concrete.

Messrs. Corrigan, Lee & Halpin, of Kansas City, Mo., were the general contractors, and the Gulf Concrete Construction Co., of Houston, Tex., were the sub-contractors on the sub-structure of concrete piles. Messrs. Hedrick & Cochrane, of Kansas City, Mo., were the consulting engineers, and they, in conjunction with the chief engineer, Mr. J. F. Witt, county engineer of Dallas County, Texas, have charge of the field work and general direction. Mr. E. N. Noyes, representing the consulting engineers, was resident engineer in charge of the work.

The City of Dallas has a population of about 93,000, including Oak Cliff, which is a residence suburb with a population of about 20,000. The Trinity River Valley lies between the two cities and averages a mile in width, with the main channel of the river not over 200 feet wide. Ordinarily a small stream, during flood times the valley becomes a wide river that causes great damage and loss of time to city residents and farmers who must cross the Trinity. As a permanent relief from such delays and for the welfare of the city and county it was decided to build a viaduct across the valley. Bonds were voted and issued to the sum of $600,000 for the purpose. In November, 1909, Mr. J. F. Witt, county engineer, advertised for competitive bids to be submitted on or before January 1, 1910.

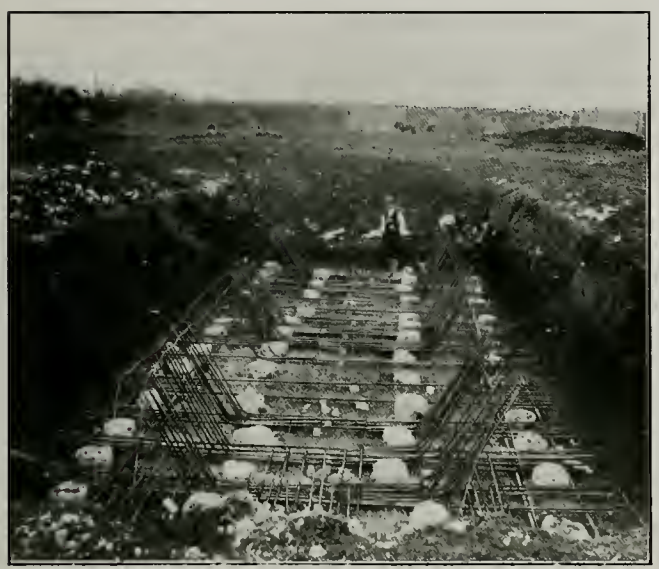
Dallas-Oak Cliff Viaduct, Dallas, Texas. Form Stripped from Archapons. Hedrick & Cochrane, Kansas City, Engineers

The county court appointed an advisory board of engineers to pass on all plans. This board consisted of Prof. U. T. Taylor, M. A., Soc. C. E., professor of civil engineering in the University of Texas; Mr. Otto H. Lang, M. Am. Soc. C. E., and Mr. N. Werenskiold.

Of the fifteen different plans submitted the board recommended the adoption of the arch design submitted by Ira G. Hedrick, M. Am. Soc. C. E., consulting engineer, and Mr. L. P. Ash, M. Am. Soc. C. E., associate engineer. Mr. Hedrick's preliminary design differed only from the final design in regard to the sub-structure or foundation. His original design called for ordinary pier footings, allowing a safe bearing power of the soil of two tons per square foot. While the valley of the Trinity River at this point is not at present subject to scour, yet it was deemed advisable to have all the piers rest on concrete piles to insure a permanent, safe foundation. After a long and careful analysis of the different kinds of concrete piles it was decided in favor of "the Portland pile" as meeting all requirements.

The viaduct approach begins near the foot of Houston street, rises 28 per cent in a distance of 567.7 feet to a point north of the tracks of the Missouri, Kansas & Texas Railroad, the Dallas Terminal Railroad, the Gulf, Colorado & Santa Fe and the Chicago, Rock Island & Pacific Railroad.

From this point to the abutment pier of the first arch, a distance of 139 feet, the structure is of trestle type of heavy reinforced longitudinal, and cross girders on three-column bents 24 to 50 feet spans. This part of the structure has a clearance underneath sufficient to allow open traffic on the railroad tracks. From a point just north of the railroad tracks the trestle portion of the structure swings away from a line parallel to the line of the north abutment, through an angle of 48 degrees, maintaining this tangent across the tracks, thence in the same direction and elevation for a distance of 2529 feet to the south bank of the Trinity River, then toward the south end a distance of 2009 feet the grade falls 1.74 per cent. There are 181 feet of trestle construction at the north end between the last arch pier and the beginning of the south abutment.



Bed of "Portland Concrete Piles," showing reinforcement: ready for cap.

There are 52 main piers supporting the arches, which have a span of 79½ feet center to center of piers and a rise of 17 feet from the springing line to the crown of arch. The maximum height of the viaduct above the valley will be about 40 feet, with a clearance of 60 feet at low water under the river span. The government is building a series of locks and dams across the Trinity River several miles below in the work of making this river a navigable stream, thus requiring the river span of the viaduct to have a clear waterway of 90 feet wide and 60 feet above low water.

This span, unlike the other portions of the viaduct, will be a steel span of steel plate girder design, having a span of 103 feet on centers of piers. The steel span is encased in concrete to harmonize with the remainder of the structure. The adjacent arches will take care of the temperature stresses in the steel span, and its horizontal thrust is designed to counter-balance the horizontal thrust of the adjacent arches.

The live loads to be provided for as follows: On each electric railway track two 100,000-pound cars; on the roadway 100 pounds per square foot, or a 15-ton road roller having a maximum axle concentration of 10 tons; on the sidewalks, 80 pounds per square foot.

Working stresses allowed for constructions give concrete in arches, 500 pounds; in girders, 600 pounds. On concrete, allowing temperature variation of 80 degrees, 750 pounds; shear on concrete reinforced for shear, 100 pounds l. d., on plain concrete shear, 30 pounds l. d.

Borings were made at short intervals on the line of the viaduct to determine the nature and depth of soils. The top soil, a black "gumbo," varied from two feet to ten feet, was very dense at this time, dry, and having large cracks due to lack of moisture; a shallow strata of compact joint clay generally underlaid the top soil, as the borings neared the river, this clay contained sand to some extent. On both the north and south slopes of the valley this soil was underlaid with white limestone at a depth of from 12 to 14 feet at an elevation below base of pier bases. This top soil or "gumbo" when comparatively dry is very difficult to excavate, is resilient and very dense; when wet it is like glue and very unstable when unconfined.

The specifications for the loading on a number of test piles required that a single pile be loaded with 30 tons for 48 hours and show no initial settlement, then further loaded until 60 tons was placed on each pile, and to show no settlement greater than one-quarter inch after 48 hours. After a series of test loads were made it was decided by the engineers and the County Board of Commissioners concurring, that in view of results shown by tests already made, that the concrete piles be given a loading of 20 tons per pile, and no further tests as to carrying capacity of piles should be made.

About 3000 concrete piles support that portion of the viaduct resting on all the main arch piers. This concrete pile—the Portland pile—is 16 inches in diameter at the top with a slight taper from the top to the point depending on maximum bearing power by having a concrete surface whose superficial area bears directly against and to the surrounding earth, with the additional column loading value. The concrete piles were placed by driving first a steel "former," consisting of a tapered boiler plate steel, enclosing a rigid steel core. The core was withdrawn to allow the concrete to be placed, but soil was found to stand up after core and shell were both withdrawn from the hole, then a wet 1-2-4 mixture of concrete was directly introduced into the hole and thoroughly puddled and tamped as placed. No reinforcing steel was used in these piles formed in place. Under two piers where both quicks and a depth of penetration was required in excess of the length of the pile formers on hand, moulded piles were used, suitably reinforced. Three standard derrick rigs and steam hammers were used for this work, one rig having a record for placing 40 piles in one 10-hour run. The north abutment pier under the first arch has cross wall pier footing instead of concrete piles, as the depth to solid rock did not warrant piles being placed under this pier. The piles under the piers vary from 52 to 58 in number under all piers, except each fifth pier, which is a thrust pier and rests on 96 piles each.

The ordinary pier is made up of three shafts 7 feet wide and 9 feet apart; the openings being arched at the top 4 feet below the springing line of shafts. The latter of these piers is one-half inch to one foot.

Each fifth pier is called a thrust pier and differs from the others in that its base is larger, the shafts rise on latter of three inches in one foot, and it is designed to take the thrust of one arch should an adjacent arch fail; thus should any one arch fail from any cause not more than five spans would fail.

Both trestle approaches to the main arch portion of the structure consists of monolithic construction of the floor slabs and longitudinal girders, which are on five-foot centers, spans from 24 to 50 feet rigid over one supporting bent, the other end resting in a copper plate socket, free to rotate; the floor slab having a line of clearage at this end. Where expansion joins are located, two heavy cast iron plates are used, the lower on being firmly fixed and

the upper plate free to slide. The cross girders are continuous over the three supporting columns of each bent, as cantilevers for the sidewalk slabs, and are heavily reinforced for shear. All columns under the trestle approach rest on ordinary reinforced spread footings.

The floor slabs over the arches rest on eight cross walls or bents 8 feet 10 inches apart, resting on the arch rib. The arch ribs are 39 feet wide, 1 foot 4 inches thick at the crown, 3 feet thick at the springing line. Each arch rib is reinforced in both intrados and extrados by 35 lines of 1¼-inch round corrugated bars with staggered splices, the reinforced steel being tied 4 feet in the crown of the piers. The arches have a span of 79½ feet center to center of piers, with a rise of 17 feet. The radius of the intrados is 46.09 feet and of the extrados 52.15 feet. The cross wall girders also carry the sidewalk slabs as cantilevers. Over each pier there is a T-section cross wall heavier than those over the arches.

The floor slab is 10 inches thick under the electric car tracks, 7 inches thick between tracks and curb, the sidewalk slab being 3½ inches thick.

Work was started on the approaches first, the retaining side walls being filled as soon as possible to allow final settlement of earth fill before paving should be commenced. The paving of the roadway of the viaduct will be creosoted wood blocks, concrete lamp standards, holding three 40-candle-power 50-watt lamps in tungsten series are located on each pier on either side.

The viaduct complete will cost approximately $570,000. The county furnished cement and gravel to the contractors. Work was started in October, 1910; sub-structure for the arch piers was started in November, 1910, and finished in May, 1911; the viaduct was finished complete December, 1911.

Opening of Multnomah Hotel

The opening of the new Multnomah Hotel in Portland to the public Thursday, February 1, was an event of more than passing interest. The massive pillars of ornamental plaster and marble in the lobby are especially impressive. The ceilings and mezzazine floor are equally so. Their treatment was the result of careful study on the part of J. D. Tresham, of the J. D. Tresham Manufacturing Company, who clearly saw the possibilities which he so cleverly marked out with true artistic effect. The time for carrying out the plaster scheme was short. Under old methods the work would have required a much longer period and would have added greatly to the cost. Ascending the marble stairway to the banquet hall one views with admiration the manner in which Mr. Tresham has carried out, with rare effect the art of his craft, where the diminishing pilasters, paneled ceilings, soffits and other details, blending in harmony, give the true artistic tone and reveal the practical hand of the master craftsman. Unstinted praise also is due Mr. Tresham's skill in marking out several noticeable features in plaster in the assembly hall and grill room.

Industrial Publications

The N. & G. Taylor Company, of Philadelphia, has issued an interesting and convincing line of literature covering the products of this enterprising firm. Among the booklets received we note "Selling Arguments for Tin Roofing," "Painting Tin Roofs," spring and fall issues of "The Arrow," "Tin Roofing Facts for Architects' Use," etc.

We are in receipt of a pamphlet on "Terne and Tin Plate," by A. P. Stradling, of Philadelphia, issued under the auspices of the National Fire Protection Association This pamphlet is a reprint of a paper considered at the annual meeting of the association held in New York May 22-24, 1907. It contains much valuable data.

The Denny Renton Clay and Coal Company, of Seattle, has published a most convenient brochure. The customers of this progressive concern will find therein tables of general information covering net prices on sewer pipe at given discounts, freight rates on sewer pipe of various dimensions, a table of discharges from sewers 4 to 36 inches in diameter in cubic feet per minute, carrying capacities of sewer pipe and drain tile, data on excavation of trenches, etc., etc. This is a good desk book for the busy architect, engineer or contractor.

Panama-Pacific Exposition Building Plans

That there will be nothing wanting in the splendor and magnificence of the buildings for the Panama-Pacific International Exposition in San Francisco in 1915 goes without saying. The architectural commission comprises Willis Polk, William A. Faville and Clarence R. Ward. Assisting them will be such famed architects as McKim, Mead & White, Henry Bacon and Thomas Hastings of New York, and L. C. Mullgerdt and George W. Kellham of San Francisco.

A meeting is planned during the present month under the rules of the board of directors for preliminary consultation on the plans already submitted for the buildings. This will be succeeded by work upon the designs of the several structures. There will follow a meeting at which the competing architects will present their several plans. No time will be lost after that before the final drawings will be prepared, contracts awarded and actual construction work gotten under way.

Tentative architectural plans of the buildings of the Panama-Pacific International Exposition have been placed upon exhibition. There are something like one hundred or more architectural studies in the series, showing the suggested arrangement and grouping of the structures to be erected within the exposition grounds. The plans represent the labors of a score of architects and draftsmen who have been engaged for three months past in the work under the direction of the architectural council and the buildings and grounds committee. There are included comprehensive schemes for grouping the buildings and the general landscape treatment of the harbor view, Lincoln Park, Golden Gate Park and civic center sections of the exposition site. These show the various proposed solutions of each problem.

The proposed memorial tower, already indorsed by the board of directors, is awakening world-wide interest. The possibilities of wireless communications from its summit will accomplish long distance results unheard of before. San Francisco can thus communicate direct with Washington, D. C., all Alaskan stations, Key West, Colon, Honolulu, vessels far out at sea and possibly with Japanese wireless stations.

A permanent exposition building to cover a city block and to cost $1,000,000 is to be one of the most attractive features of the 1915 Panama-Pacific International Fair. It will be located in the proposed civic center and will be retained for use as a permanent exhibition building after the fair is over. The committee on buildings has been given an appropriation of $1,000,000 by the exposition company.

Address Before Oregon Chapter, A. I. A.

By EDGAR M. LAZARUS, Architect

It is with especial pleasure that I am addressing you tonight on the present activity of the A. I. A., for at the forty-fourth annual convention of the institute held in San Francisco in 1910, I was appointed by the president, Mr. Irving K. Pond, on the Committee of President's Address, of which Mr. C. Grant La Farge of New York was chairman. As Mr. Pond's speech is printed in full in the journal of proceedings, I beg that each and every one here tonight will make it a point to read this address, for it will make you better acquainted not only with the vital issues that affect the status of the institute as an organization, but that you will better understand the position of great power and responsibility that the institute wields in this country and its wide geographical importance.

The institute, as you all know, has its permanent headquarters in Washington, D. C., in the Octagon House, in which President Madison carried on the Government while they were making the old President's house into the White House, to cover the stains of the burning by the British.

The institute has been in existence fifty years (fifty-three, to be exact), and embraces in its membership practicing architects throughout the whole United States, and its proud record of over a half century is especially notable for the fact that in its membership is represented the highest type of practitioner in a given community. The profession at large fully comprehends this, but not the general laity, particularly is this the case in the newer settled communities.

After fifty years of development and experiment we are fast beginning to formulate our codes, and we may spend some time yet before we can definitely state what rules are best suited to all conditions.

The following is an excerpt from President Pond's address at the forty-fifth annual convention, which should be a frontlet between your eyes:

> The American Institute of Architects stands as guardian of the interests of the client and the community quite as much as the welfare of the individual practitioner and the profession generally. Its codes are to protect the client as well as the architect. Its fundamental ethical principle is based upon the idea of justice and fair dealings as between man and man, be they architect and client or architect and architect—upon a recognition of individual rights and individual duties. If schedules are established, it is not that the architect may have a lever with which to pry loose undeserved money from the client, but that he may have an authoritative basis on which to comput values. If codes of ethics are formulated it is that the unthinking and morally untutored may know what always instinctively has guided the actions of unselfish and fair-minded men—and themselves be guided.

At the behest of the institute the United States Government took its first step towards organized control in its art work, when by the executive order of President Roosevelt the council of Fine Arts was put into action January 19, 1909, and was composed of thirty-one men skilled in the arts of architecture, painting and sculpture. These men were selected from various states of the union as widely as possible from New England to California. This, in common with other commissions created under executive order, did not receive the support of Congress and the executive order was consequently rescinded by President Taft. The appointment of the council called for general expressions of approval by the press and the people throughout the nation.

I have to suggest that the president of this chapter take under consideration the appointment of a committee to formulate a paln for seeking favorable action through the proper committee of the New Charter Commission or the City Council, to the end that a permanent Municipal League or Department of Public Works, under which would be placed the construction, adornment and maintenance of all public buildings, bridges and roadways, and that before any plans are formulated for any public improvement of the nature herewith outlined, the matter be submitted to said body and their advice followed. In this way our future art development would progress on harmonious and artistic lines.

In the code of ethics, the competition code, and in the cognizance it takes in all professional activities the institute stands for fair play. The code of ethics formulated about two years ago is a clear statement of certain principles of conduct and of professional practice which had always been the guide of the best men of the profession and had been more or less nebulous in the minds of others. The competition code—of more recent expression, covers the salient features of competition and is issued as a guide to juries in the formation of a program. The competition exists primarily for the benefit of the client, and only incidentally to the advantage of the individual architect. Eventually, clients unable to secure competitors of standing will of necessity come to terms and have a higher respect for the practitioner and the profession as a body.

The demands upon the architect both in professional service and in the cost thereof, have greatly increased since the schedule was adopted some forty-five years ago; it represented a fair remuneration at that time, but it does not represent a fair remuneration now. The new schedule with its basic rate of 6 per cent has been well received and adopted. It is found to be acceptable to public authority except, of course, in cases where there exists a definite limitation by law or where negotiations precedent to its publication had been begun. The reasons for the increased rate are considered sound by business men generally and the increase is regarded as proper. It therefore rests with the architects themselves to establish this schedule calling attention to the fact that the 6 per cent rate is regarded as a minimum not a maximum rate.

No objection could be raised to an individual member of the institute issuing his own schedule of charges, if he used the institute's schedule as a minimum basis; but when a chapter does so it tends to confuse the public and therefore to nullify the efforts of the institute towards a clear and general understanding. The public does not always differentiate between the chapter and the institute. Moreover, if this practice did become general among the chapters, conflicting rates would, in fact, soon appear on all those items not mentioned in the basic schedule of the institute. The courts or public authorities, as well as individuals, would find great difficulty in adjusting such matters.

The chapter should see to it that their codes are not at variance with the policy of the institute. The chapters are best fitted to deal with local conditions. We have to be the adviser and, as need arises, the respected arbitrator of matters of gravest importance. *Formerly*, it was with difficulty that we obtained a hearing from either the public or the Government. *Today*, we are welcomed in the councils of all those who sincerely desire to do well in matters within the sphere of our profession. Our great and growing cities, our states and the National Government itself, all call upon us for professional counsel, and approach the subject of architecture and the other fine arts from a standpoint largely influenced thereby.

This chapter will eventually, and very soon, I hope, be called upon by our civil associations and municipal authorities to assist in the study and betterment of civic conditions. The movement for a Greater Portland is now already under way by Greater Portland Plans Association. It would be superfluous to add we stand ready at all times to assist in these endeavors for the public good, for we must not forget we have a citizen's duty to perform so far as we can do it within our sphere, and with it the citizen's right to suggest or demand.

That the work done in teaching design by such agencies as the Architectural Club, Architectural League of the Pacific Coast and the Beaux Arts Societies are of great value and a boon to the student no one can deny, and nothing is lost by the chapter in its encouragement of these organizations, for they are assets of no small value, and each and every member of the chapter should feel a personal responsibility in their welfare. We must not forget that it is the student today who is the practitioner of tomorrow. We should, therefore, act helpfully toward the younger men, share with them our successes, give them their chance as we have had ours, and foster their reasonable ambitions for professional opportunity and success. They will richly repay you by loyal support of those principles and ideals for which you stand.

Remember, gentlemen, that this chapter is now a part of the great national organization, and that its strength lies not in its numbers, but in the moral and artistic caliber of its members, and that it must be conducted upon a broad basis, which can only be done by thinking less of yourselves as a profession, but more as a mouthpiece of all that is best in civic life.

Philadelphia Chapter, A. I. A.

In accordance with the regularly established custom the January meeting of the Philadelphia Chapter was given up principally to a full discussion of the work accomplished by the institute at the forty-fifth annual convention in Washington.

Previous to that part of the business, however, the committee on the preservation of historic monuments, through Mr. C. A. Ziegler, chairman, reported that his committee and the city authorities of Philadelphia have concluded arrangements for the restoration of old Congress Hall at Sixth and Chestnut streets, and that the first contracts for some of the work have already been signed.

The consideration of the convention proceedings was then taken up and was opened by a written report presented by Mr. D. Knickerbacker Boyd, one of the delegates to the convention, which report went into minute description of the three days' work and formed the basis of the subsequent discussion by the members present.

Mr. Frank Miles Day gave his impressions of the work accomplished during the past year by the institute, and spoke particularly of the progress made in the regulation of competitions under the present competition code.

Mr. Albert Kelsey made a verbal report on the convention, and Mr. Wm. L. Plack presented a written report, which, with the others, was ordered filed.

Further discussion was taken part in by Messrs. Ziegler, Medary, Crane and others of the members present, many of whom had attended the convention in Washington and were much impressed with the harmony which prevailed there and with the satisfactory disposal of the many matters of importance which came before the convention.

Other committees reported routine work, and the president of the chapter, Mr. John Hall Rankin, announced the appointment of the committees for the year 1912 as follows:

Admissions.—A. H. Brockie, chairman; Thomas M. Kellogg, William L. Bailey, Albert Kelsey, E. Perot Bissell.

Biography and History.—E. A. Crane, chairman; C. Z. Klauder, George I. Lovatt, William L. Plack.

Competitions.—J. H. Rankin, chairman, ex-officio; E. D. Hewitt, M. B. Medary, Jr., H. W. Sellers, W. H. Thomas.

Education and Program.—P. P. Cret, chairman; W. P. Laird, C. C. Zantzinger, J. P. B. Sinkler, A. H. Granger.

Chapter Jury.—E. A. Crane, F. M. Day, Albert Kelsey, P. E. Paist, Edgar V. Seeler, J. P. B. Sinkler, P. P. Cret, J. McArthur Harris, M. B. Medary, Jr., H. W. Sellers, J. T. Windrim, C. W. Churchman.

Municipal Improvements.—F. M. Day, chairman; C. L. Borie, Jr., Albert Kelsey, George B. Page.

Preservation of Historic Monuments. C. A. Ziegler, chairman; F. M. Day, H. W. Sellers, T. M. Kellogg, E. L. Stewardson, George C. Mason.

Public Information.—D. K. Boyd, chairman; J. T. Windrim, George I. Lovatt, John Molitor.

Entertainment and Meetings.—Edmund C. Evans, chairman; George I. Lovatt, A. H. Granger.

Chapter Membership.—Albert Kelsey, chairman; John Molitor, W. W. Sharpley, C. L. Borie, Jr.

Finance.—Milton B. Medary, Jr., chairman; C. L. Borie, Jr., Frank R. Watson.

A Troublesome Matter

THE PACIFIC COAST ARCHITECT is in receipt of a communication from Messrs. Foeller & Schober, architects, at Green Bay, Wis., enclosing copy of letter recently sent to the secretary of the American Institute of Architects, which copy we herewith reproduce:

We have been for some time wondering why the different Architectural Journals could not be induced to print their plates all on the same size sheet and on one side of the sheet only. The Western Architect, for instance, is printing its illustrations on two sides of the sheets, and The American Architect lately is furnishing many double sheets for illustrations which could be just as well split up and put on single sheets. As the plates are now, they are hard to file with any kind of a system. Could not this matter be taken up by The American Institute of Architects at the next annual convention? We think a suggestion of this kind would have considerable more weight coming from the Institute than from a few individuals.

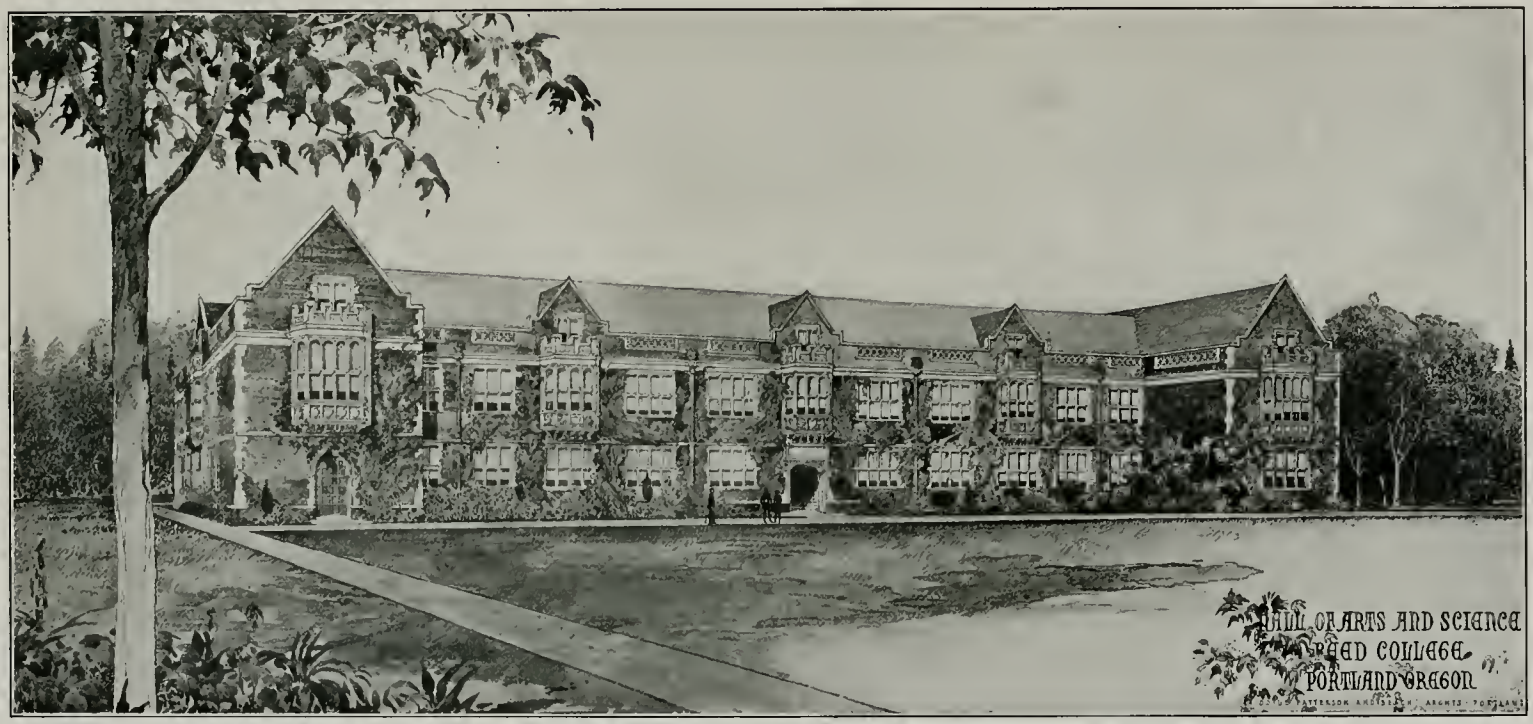
We sincerely hope that something can be done to remedy this, to us, serious defect in the make-up of these different magazines. We do not know how most other architects feel on this matter, and would like to inquire if you have had any similar inquiries or objections heretofore.

We would suggest to our correspondents that it might be well for them to use cabinet files that would permit of the filing of sheets of the maximum size of the largest-paged architectural publication published. Naturally, these would allow for the filing of all sheets under the maximum size. To us it seems a far easier matter for any architectural firm to adapt the size of its files than to hope or expect that all architectural publications should consent to adapt the size of their pages to fit any special file.

Tenino Stone Endorsed

On the principle that all Pacific Coast industries which will develop its resources and make for its progress are worthy endorsement, THE PACIFIC COAST ARCHITECT herewith reprints a resolution adopted by the Southwest Washington Development Association and Peninsula Development League, in joint convention at Olympia, Wash., January 26, 1912:

Resolved, That we endorse the efforts of the Tenino Commercial Club to prevent the crushing of the stone industry of the state through the importation of Eastern stone for public buildings; and that the Southwest Washington Development Association recommends that architects, school boards, building committees, county commissioners and public officials generally of this state discontinue the practice of importing Eastern stone for our public buildings to the detriment of our home quarries, our workmen and our people generally; and that we suggest to the state capitol commission the use of Washington material as far as possible for the construction of our capitol building, where such materials can be obtained at reasonable cost.



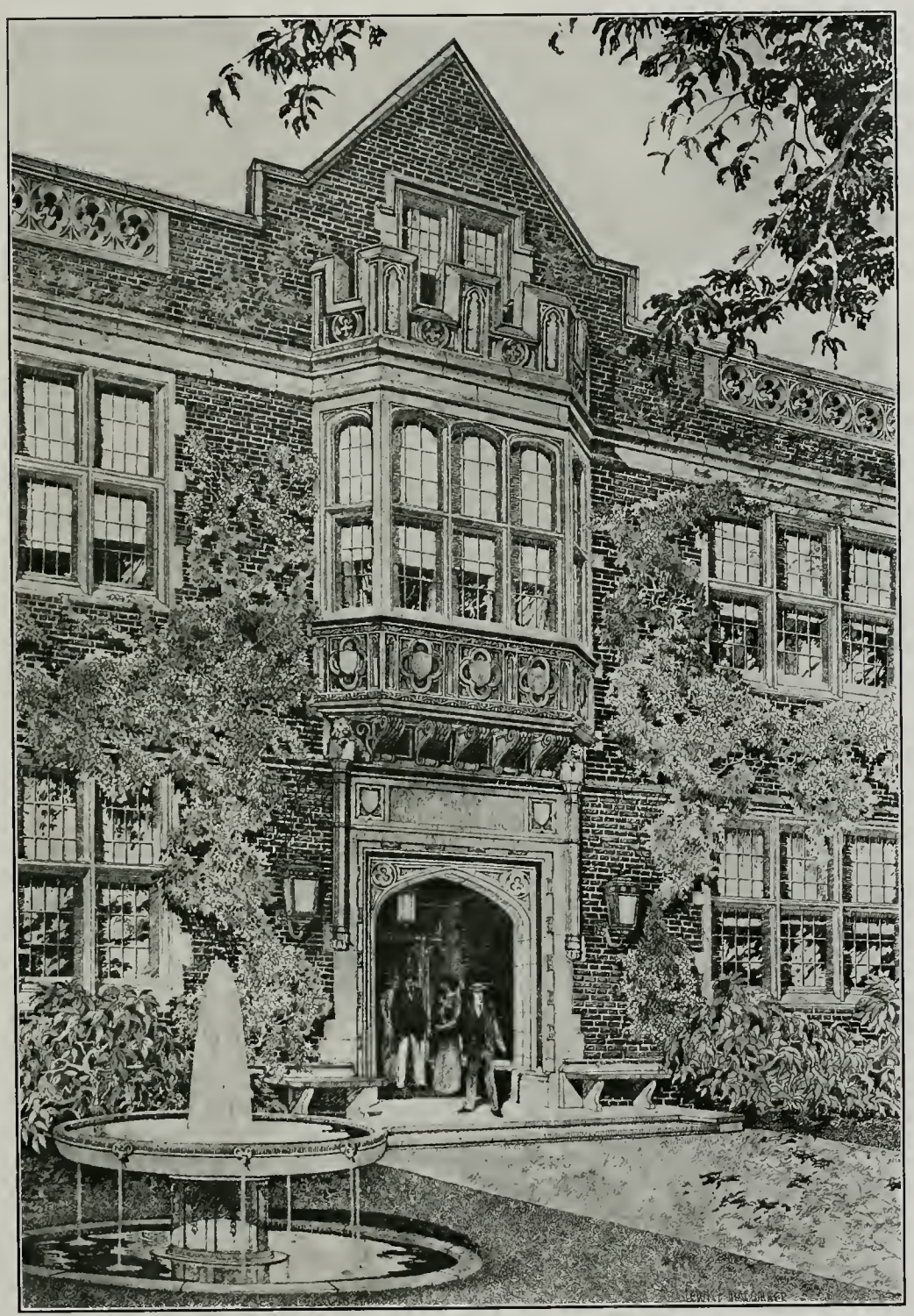
Hall of Arts, Reed College, Portland
Doyle, Patterson & Beach, Architects

PHOTO BY THE ANGELUS STUDIO

View from Quadrangle. Domitory and Administration Building, Reed College, Portland

Doyle, Patterson & Beach, Architects

PHOTO BY THE ANGELUS STUDIO



Detail of Main Entrance to Hall of Arts, Reed College, Portland — PHOTO BY THE ANGELUS STUDIO

Doyle, Patterson & Beach, Architects

Detail of Main Entrance to Dormitory, Reed College, Portland

Doyle, Patterson & Beach, Architects

PHOTO BY THE ANGELUS STUDIO

Hotel Multnomah, Portland
H. Hanselmann, Architect

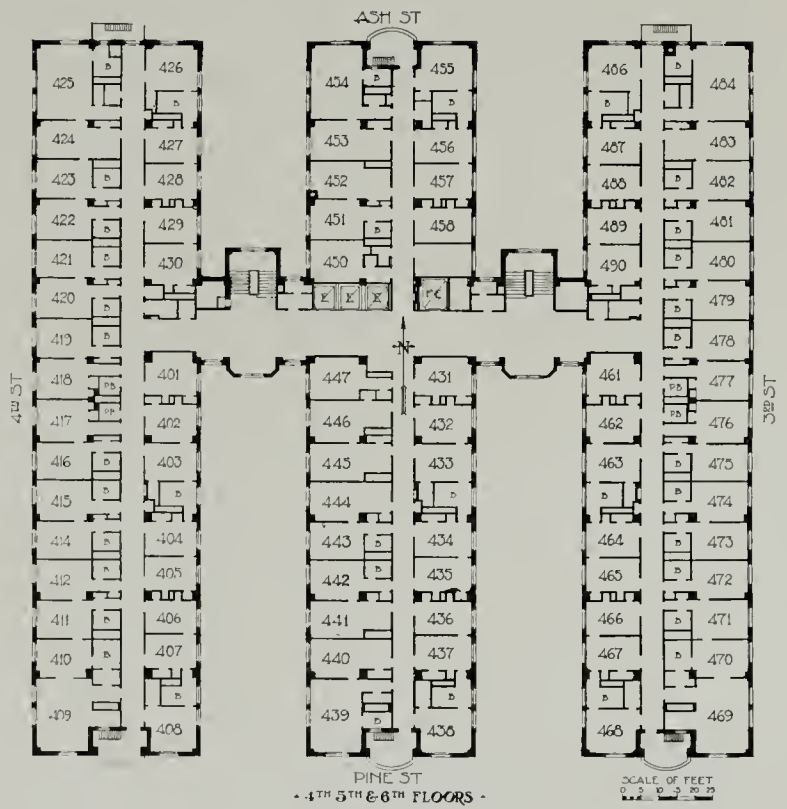
PHOTO BY THE ANGELUS STUDIO

Lobby, Hotel Multnomah, Portland
H. Hanselmann, Architect

PHOTO BY THE ANGELUS STUDIO

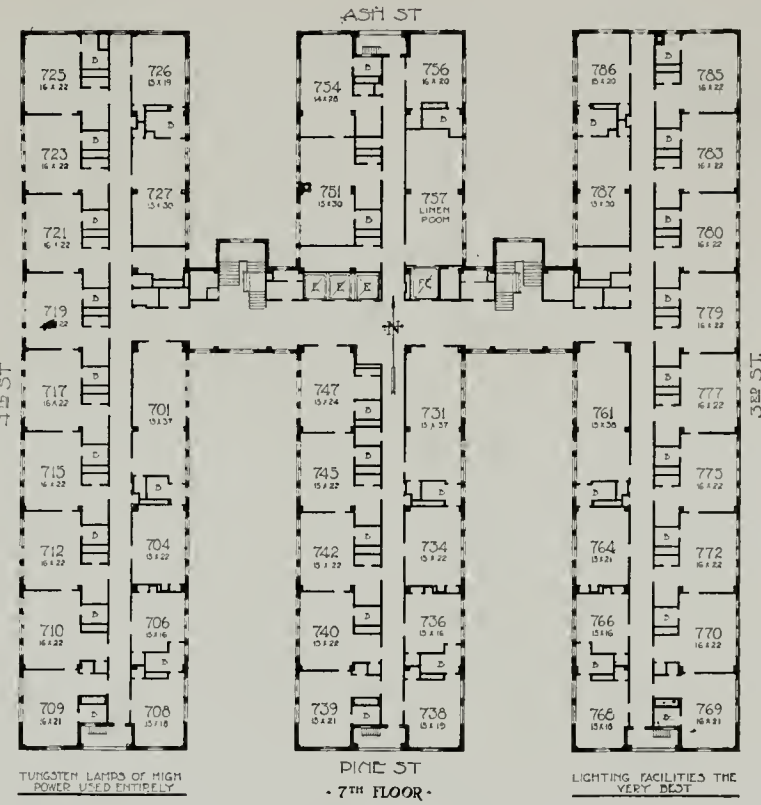
Lobby, Hotel Multnomah, Portland
H. Hanselmann, Architect

PHOTO BY THE ANGELUS STUDIO



- 4TH 5TH & 6TH FLOORS -

- HOTEL MULTNOMAH -



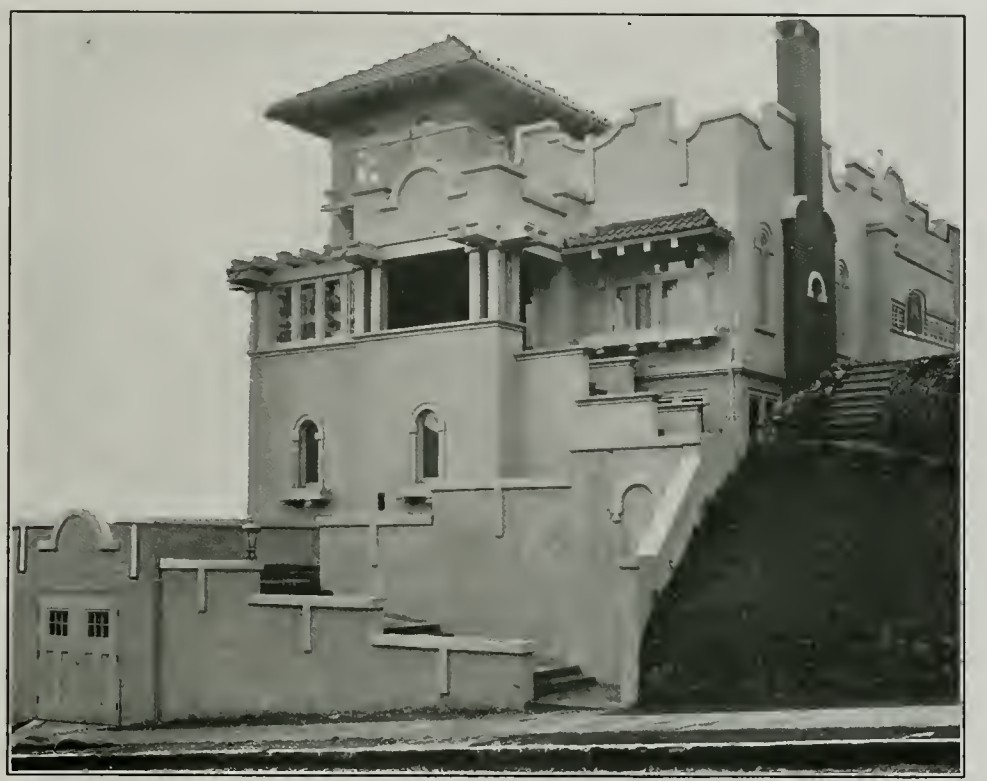
- 7TH FLOOR -

- HOTEL MULTNOMAH -

- SAMPLE ROOMS -

Hotel Multnomah, Portland
H. Hanselmann, Architect

PACIFIC COAST ARCHITECT
FEBRUARY, 1912

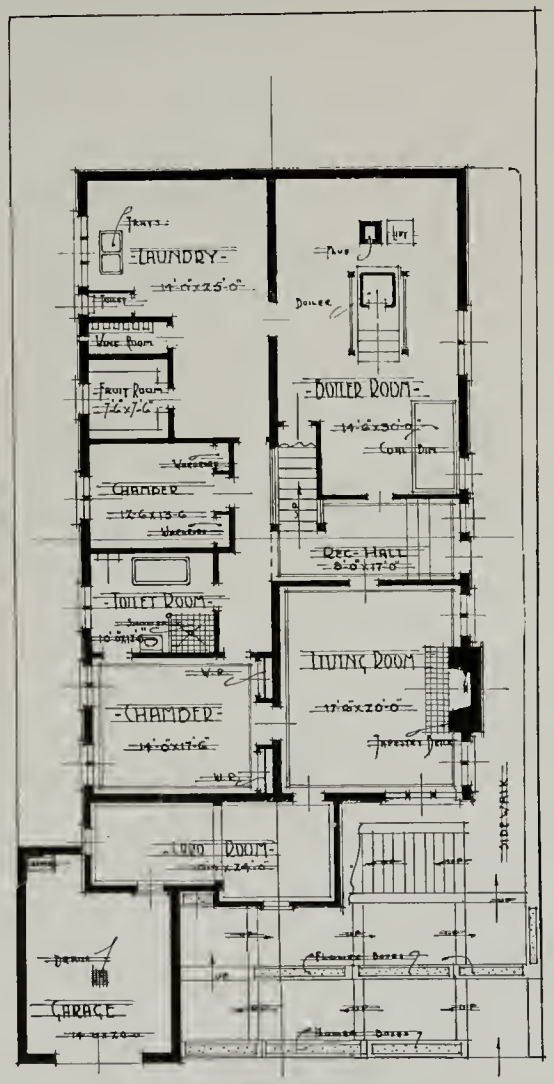


Elevation, Residence Mr. E. E. Coovert, Portland
Roberts & Roberts, Architects

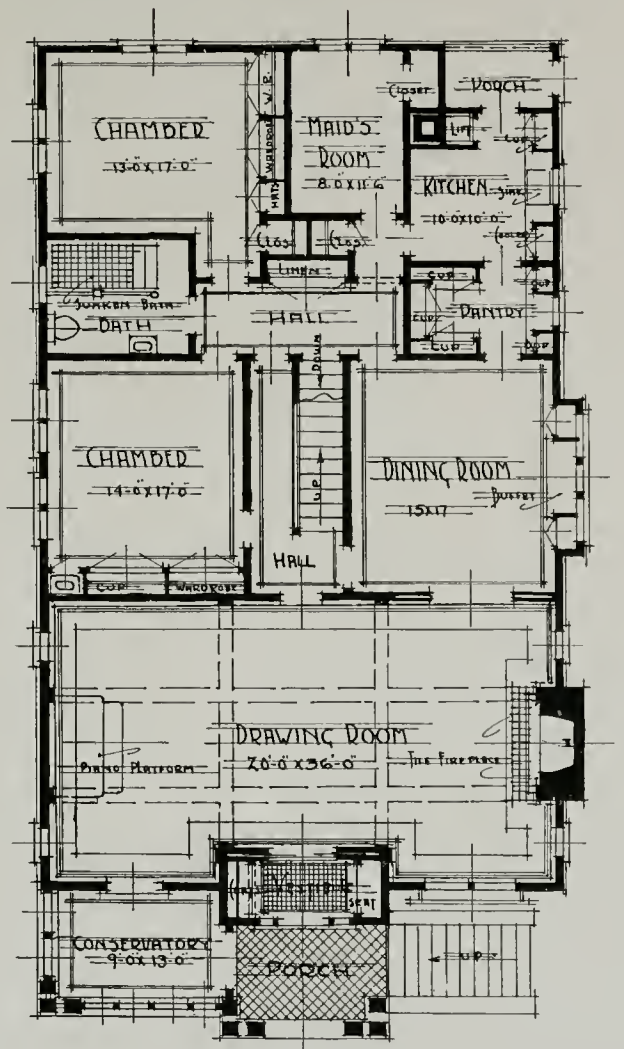
West View Living Room, Residence Mr. E. E. Coovert, Portland
Roberts & Roberts, Architects

Den, Residence Mr. E. E. Coovert, Portland
Roberts & Roberts, Architects

East View Living Room, Residence Mr. E. E. Coovert, Portland
Roberts & Roberts, Architects



BASEMENT PLAN



FIRST FLOOR PLAN

Floor Plans, Residence Mr. E. E. Coovert, Portland
Roberts & Roberts, Architects

PACIFIC COAST ARCHITECT
FEBRUARY, 1912

Written expressly for The Pacific Coast Architect

Suggestions for Fireplace Construction

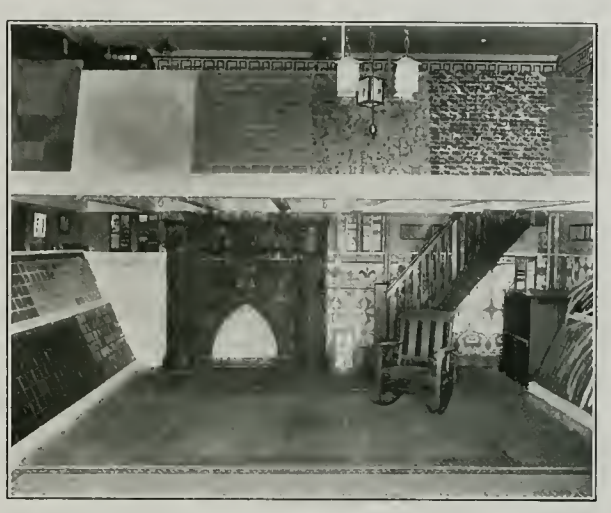
By FRED W. WAGNER

The fireplace, in a peculiar and intimate sense, is the center of the home. A gas stove or a radiator may contribute to bodily comfort, but the open fire does more—it extends a vista in the world of imagination, of pleasant memories; it is companionable. A home without it is like a home without books. A fireplace is not a luxury, it is a necessity—because it adds to the joy, comfort and beauty of living.

General View Fred W. Wagner's Sales Room — *Photo by The Angelus Studio*

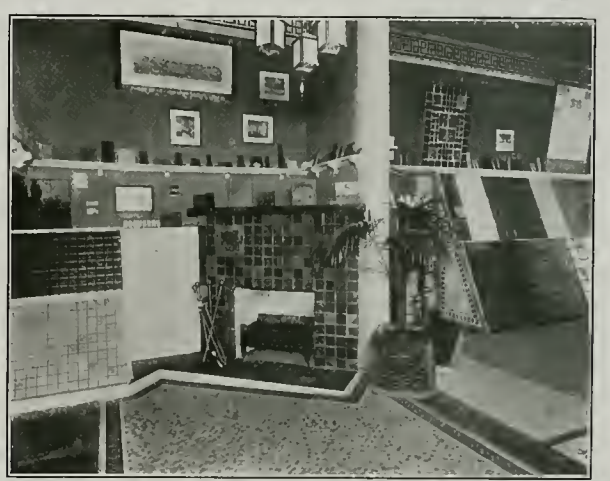
Now, as a design, the fireplace becomes the dominant note in the entire scheme of decorating and furnishing, hence it must be thought out with a restraint that shall keep it in its proper place as a unti in a harmonious whole. Its proportions, form and color, must always be considered as relative to other things. It should invite attention without being obtrusive. It should quietly assert itself as if to invite attention to the cheer and comfort that it gives a room. In general, a choice of tile is a troublesome and difficult task. So many questions of size, shape, color, texture and price are to be taken into consideration. It frequently happens that a sample tile, beautiful in itself, will make a monotonous and uninteresting fireplace and one without life or character.

STROBL TILE MANTEL
Display Room, Fred W. Wagner — *Photo by The Angelus Studio*



MORAVIAN TILE MANTEL
Display Room, Fred W. Wagner — *Photo by The Angelus Studio*

The face of a fireplace should be treated as a unit of composition with accents of color and variations of texture, touches of interest that the eye never tires in viewing. After the selection is definitely settled upon the next and most important question is to see that the fireplace is rightly



BATCHELDER & BROWN, Pasadena Tile Mantel
Display Room, Fred W. Wagner — *Photo by The Angelus Studio*

built, and does not smoke. There are two things in the home that can cause more annoyance and discomfort than anything else, no matter how fine the surroundings and decorations or how complete the other arrangements, and these two things are a leaky roof and a smoky fireplace. A few of the more important points are these, that whatever the number of square inches of the fireplace opening, the flue should have one-fifth that area. It should be thoroughly cleaned before being accepted by the architect and the firebrick lining should be built at least eight or ten inches higher than the frieze of the mantel, or where the arch bar crosses the opening. The opening at the throat should not be too large or too small, four inches being about right for an ordinary fireplace. Under no conditions should more than one heating or cooking fixture feed into the same flue of any fireplace.

Builders' Exchange of Portland

The Builders' Exchange of Portland was organized less than a year ago, yet it shows a vigorous growth and now has a membership of 225. During the past month the Master Builders' Association, long established, and the Builders' Exchange were merged into one organization.

The main purpose this institution has in view is the advancement of local business interests and the elimination of irresponsible and dishonest contractors. Its headquarters is at the northwest corner of Second and Alder streets. Its officers are:

President, E. B. White, general contractor; vice-president, E. E. Angell, general contractor; secretary and manager, L. F. Danforth, contracting painter; treasurer, D. W. Ward, plastering contractor. The board of directors, including the officers, is composed of the following: John Ruedy, G. E. Weaverson, W. F. Blaessing, Fred W. Wagner, F. R. Jacobsen, Thomas Muir and H. B. Loveridge.

The Exchange has been the direct means of bringing more than $500,000 worth of work to the city from outside sources, and it has been made the repository for all plans of Government buildings projected in this territory.

Personal Mention

Architect Robert F. Tegen is in Vancouver, B. C., on business.

Architect Lewis I. Thompson is making an extended trip in the East.

Architect H. H. Ginnold, of Seattle, has moved from 661 Empire Building to 803 Northern Bank Building.

Bernard C. Jakway, of the firm of J. G. Mack & Co., was a recent visitor to Aberdeen, Wash.

D. T. Farnham, assistant manager of the Denny-Renton Clay and Coal Company of Seattle, was a recent visitor in Portland on business.

Architect W. D. Van Sicklen, of Seattle, has opened an architectural office at 616 Hayward Building, Victoria, B. C.

C. C. Smith, sales manager of the Western Clay Company, was a recent visitor to Salem on business.

Architect A. E. Doyle, of Doyle, Patterson & Beach, has returned from an extended trip in the East.

Architect Alvin Johnson, of Seattle, has moved from 901 Northern Bank Building to 227 Arcade Building.

C. Lewis Wilson & Co., architects, formerly located in the Empire Building, have moved to 809 Northern Bank Building, Seattle, Wash.

Architect H. B. Pearce, Seattle, has moved from 425 Arcade Annex to 471-472 same building, where he will have larger and more adequate quarters.

Mr. Whidden, senior member of the architectural firm of Whidden & Lewis, is making an extended trip in the far East.

E. J. Mathews, vice-president and treasurer of the Denny-Renton Clay and Coal Company of Seattle, was a recent visitor in Portland.

C. J. Dondero, of the Portland Cement Laundry Tray Company, has returned from a business trip to Seattle.

M. M. York, sales manager of the Pacific Face Brick Company, has returned to his desk after an absence of a six weeks' sick spell.

Architect E. E. McClaran, 525 Lumber Exchange Building, has returned from a business trip to Walla Walla, Wash.

P. W. Rochester, manager sales and traffic department of the Washington Portland Cement Company of Seattle, Wash., was a recent visitor in Portland on business.

Munson Dewprey is now connected with the sales force of the local office of the Trussed Concrete Steel Company and will cover the Northwest territory.

J. F. Kable, formerly of the firm of architects Kable & Kable, is now associated with the Pacific Iron Works as architectural engineer.

Architect F. Stanley Piper, of Bellingham, Wash., has formed an association with Mr. Brown, of Vancouver, B. C., and has opened an office at 216 Carter-Cotton Building in the latter city.

Architect James Schack, Downes Building, Seattle, is on a two months' trip to Germany. While away he will visit his people, returning about March 1st.

Architect H. B. Spear, of Seattle, has opened an office in Chehalis. Mr. Spear is one of the members of the firm of McCoy & Spear, Seattle.

The partnership of Bernbach & Mayer, architects, 720 Marquam Building, has been dissolved. Max F. Mayer, the retiring partner, has gone East. George Bernbach has taken charge of the business and will remain at the same place.

The architectural firm of Baker & Bingham, 113 Maegly-Tichner Building, has dissolved, George E. Bingham retiring. Mr. A. Clark Baker has enlarged the offices and will conduct the business under the name of Baker Architectural Company at the same place.

P. O. Brandenberg, draftsman for Robert F. Tegen in his Vancouver, B. C., office, has returned to the local office.

Mr. Crane of the architectural firm of Rankin, Kellogg & Crane, of Philadelphia, was a recent visitor in Portland. Mr. Crane is making an extended trip through the Pacific coast states.

Architect Bennes of Bennes & Hendricks has returned from a six weeks' trip through California.

Architect John P. Cook has opened an office in Lakeview, Ore. Mr. Cook was formerly located at Alturas, Cal.

C. D. Swan, the eminent English civil engineer, who was commissioned by the Canadian government to prepare plans for harbor improvement at Vancouver, B. C., has practically completed his work and will leave for Europe in a few days.

Charles H. Walker, formerly a member of the firm of Hooper & Walker, Winnipeg, architects to the government of Manitoba, has moved to Victoria, where he will practice his profession.

David R. Brown of the architectural firm of Brown & Valance, of Montreal, has been in Vancouver, B. C. He has inspected the University of Point Grey site at Point Grey, B. C., and it is expected that his firm will submit plans for the construction of the building.

Among Portland visitors recently was S. T. Whittaker, an architect of Ogden, Utah. Mr. Whittaker is much interested in reinforced concrete construction, to which he is devoting much study. The large and ever increasing number of this class of buildings in this city afforded him exceptional opportunities for study. He intended going to Seattle, Tacoma and Spokane to continue the study of the subject.

Among the many candidates for nomination at the coming primaries for the office of sheriff of Multnomah County on the Republican ticket W. B. Hollingsworth is perhaps the most widely and favorably known. For the past seven years "Holly," as he is best known, has most ably and satisfactorily filled the position of chief deputy in Sheriff Stevens' office. "Good Luck Holly" is a prime favorite with attorneys and the public, and a most efficient man. Mr. Hollingsworth was formerly chief credit man and head bookkeeper for the F. W. Devoe Paint Company, of Chicago, and later on had charge of the Portland office for the same company. He enters the present campaign with brilliant chances for success.

Trades Notes

W. P. Fuller & Co. furnished all the plate glass in the new Multnomah Hotel.

C. N. Stockwell, manager of the Columbia Hardware Company, is on an extended trip East.

Timms, Cress & Co. furnished all the bar lock sidewalk lights for the Multnomah Hotel.

J. C. Wineland Building and Engineering Company have moved from the Macleay Building to 313-315 Selling Building.

The Washington Brick, Lime and Sewer Pipe Company of Spokane furnished the cream plastic brick on the Multnomah Hotel.

L. R. Walker, of Stebbens, Walker & Spinning, Tacoma, has returned from a visit to St. Louis.

George Sohns, local manager of the Lithocrete Company, is on a business trip to Seattle and Vancouver, B. C.

L. A. Spear, manager of the Washington Brick, Lime and Sewer Pipe Company of Spokane, was a recent caller at the local office.

All the Northwest managers of the H. W. Johns-Manville Company have returned from their annual convention just being held in San Francisco.

The Portland Wire and Iron Works have just finished installing office railings and enclosures for the Gauld Company.

J. C. English & Co., 128 Park street, furnished and installed the lighting fixtures in the E. E. Coovert residence shown in this issue.

The Western Building Material Company, 801 Lewis Building, will furnish 10,000 barrels of cement to be used in the construction of the Reed Institute.

W. E. Burke, sales manager for the Three Forks Portland Cement Company of Trident, Mont., was a recent visitor to Portland and the Sound cities.

The Seattle Commercial Club have moved their quarters from First and Columbia streets to the third floor of the Postal Telegraph Building.

J. A. Drummond, 823 Madison street, Seattle, coast representative for the N. & G. Taylor Company, Philadelphia, is on an extended business trip through California.

J. C. Bayer, 204 Market street, has the most complete kalimine plant on the Pacific Coast, where he manufactures kalimine door, trim and copper store fronts.

The Sullivan Tile Company, Board of Trade Building, have moved their office to 129 East Water street.

The Portland Cement Laundry Tray Company will start to manufacture charcrete laundry trays on or about March 1st. This tray stands every test that it has been put to and is only half the weight of the concrete tray.

The Portland Sheet Metal Works is doing the kalamine work and metal sash in the Lincoln High School, and the sheet metal work, roofing and metal windows on the Woodard-Clarke and Honeyman warehouse.

The Denny-Renton Clay and Coal Company of Seattle, Wash., will furnish through their local agency, the Western Clay Company, the vitrified building pavers for the Pendleton High School.

M. L. Kline, 84-86 Front street, furnished all the plumbing materials and fixtures in the Multnomah Hotel. The Hasslo Engineering Company did the work.

John L. Howard, president of the Western Building Material Company, was a recent visitor to their local office. Mr. Howard was making his usual spring visit, returning from Nanaimo, B. C., on his way to San Francisco.

J. S. Winters & Co., 605 Couch Building, have the contract for the erection of the four-story 50 x 200 building for the Crown Trust Company and foundation for the Shea Building, Second and Burnside streets.

The Parelius Manufacturing Company furnished all the interior trim, doors, windows, casings, bar and fixtures, and manufactured and placed all the woodwork in the Multnomah Hotel.

Timms, Cress & Co. have just finished the onyx work on the People's Theater building at West Park and Alder streets and have secured the contract for furnishing the onyx for the Montana Amusement Company's theater at Butte, Mont. The onyx in both of these jobs being the genuine Pedrara Mexican onyx, is handled exclusively in this territory by Timms, Cress & Co.

The Kelley Manufacturing Company, 45 to 52 North Tenth street, manufacture all kinds of special design furniture, and at the present time they are finishing in their factory two dozen specially designed library tables made of yaka and quartered sawed oak.

The Pacific Face Brick Company will furnish the cream white plastic brick on the Woodard-Clarke building, white brick on the Holtz Department Store Building and the brick for the E. F. Wassell four-story building at Twentieth and Kearney streets.

F. B. Gilman, local manager of the H. W. Johns-Manville Company, has returned from San Francisco, where he attended the convention held for the managers of the Pacific coast states of his company.

The G. P. Eieman Lumber Company, 519-521 Railway Exchange Building, furnished and laid the clear hard maple floors in the assembly hall, banquet and committee rooms in the new Multnomah Hotel. This firm carries in stock a full line of Eastern oak and maple flooring in all sizes and thicknesses.

The Western Stovepipe and Sheet Metal Company, 429 Stark street, supplied and installed all the cooking utensils, steam table, chef's table, range, pot rack, bake oven and equipment, and planned the refrigerators in the new Multnomah Hotel. Ernest Auestselin, the chef of the new hotel, expresses himself as delighted with the culinary department, and states that the kitchens of the Multnomah are as large and in many ways superior to those of the Hotel Astor, New York.

The Spokane Ornamental Iron and Wire Works, Spokane, Wash., has just completed the ornamental iron work on the new Multnomah Hotel and will furnish the ornamental iron for the new Lipman-Wolfe building, Fifth and Washington streets.

J. C. Bayer, 204 Market street, did the roofing and skylight work and installed the ventilating in the basement of the new Multnomah Hotel, and is installing the kalimine work in the Multnomah County court house and the new Lincoln High School, and is doing the roofing, kalimine and copper work on the Merchants National Bank at Fourth and Washington streets.

B. H. Ohler has opened an office at 1402 Yeon Building for the Kawneer Manufacturing Company of Niles, Mich., and will represent the factory direct. Mr. Ohler will have charge of the Northwest territory.

The drapery, color scheme and elegant furniture in the handsome Coovert residence, illustrated in this issue, were especially designed by the well known house of J. G. Mack & Co. These all adjust themselves in one harmonious blending of beauty and utility unsurpassed in any local home of which we know.

One of the up-to-the-minute hardware firms of Portland is the Columbia Hardware Company. It handles the Sargent artistic hardware. The Columbia Hardware Company's exhibition room at 104-106 Fourth street contains a full assortment of this high class hardware and is worthy of a visit from those who desire only high grade hardware, such as is manufactured by Sargent & Co., 1159 Leonard street, New York.

The Trussed Concrete Steel Company have opened a branch warehouse at 117 Front street, where they will carry a complete line of the well known Kahn system products. They have installed a powerful motor driven shear, and are in a position to cut to exact lengths all reforcing bars. For this they make no extra charge either for labor or scrap. Their stock of ribbed bars, round rods, ribbed laths and high ribbed sheeting, ribbed studs, stair threads and joist hangers is complete in all sizes. All orders will be filled the day they are received.

Insurance authorities predict that the time is coming in the United States when the owners of buildings will be held responsible for fires spreading from their buildings to those of others, as is the case abroad. In this connection a striking illustration is given in a recent issue of *Roofing Tin,* issued by the N. & G. Taylor Company of Philadelphia. A paper box factory in that city was gutted by fire Though the stock was highly inflammable and the floors were saturated with grease, varnish, etc., the superior tin roofing on the structure made by the Taylor Company held the roof intact and prevented the spreading of the flames.

A Resume

Recent items selected from the daily advance reports of THE PACIFIC COAST ARCHITECT:

PORTLAND.

Stores and Hotel—Architects Bennes & Hendricks prepared plans for a four-story brick building, 50x100 to be erected on Second and Burnside streets.

Residence—The Lucius and Newcomb Engineering Company prepared plans for a two-story twelve-room residence, to cost $6000.

Garage—Claussen & Claussen prepared plans for a two-story brick garage, to be built on Twenty-third and Washington streets, at a cost of $10,000.

Bungalow—Architect George W. Foreman prepared plans for six-room bungalow, to cost $3000.

Store Building—Architects Parker & Banfield prepared plans for a two-story concrete and brick building for The Strowbridge Hardware & Paint Company, to cost $30,000.

Residence—Architects R. N. Hockenberry & Company prepared plans for an eight-room semi-colonial residence, to cost $5000.

Hotel Building—Architects Bennes & Hendricks prepared plans for a four-story brick hotel building, to be erected on Eleventh and Yamhill streets, to cost $35,000.

Apartment House—Architect G. H. Hampton prepared plans for a two-story frame apartment house, to be erected on East Twenty-sixth and Belmont streets.

Factory Building—Architect Edward T. Root prepared preliminary plans for a factory building at Linnton for The Johnson-Bradford Company.

Residence—Architects R. N. Hockenberry & Company prepared plans for an eight-room Dutch Colonial residence, to cost about $5000.

Apartment House—Architects Bridges & Webber are preparing plans for a four-story brick apartment house, to be erected on Ford street.

Apartment House—Architect W. H. Cowen prepared plans for a two-story brick apartment house, to be erected on Mill and Chapman streets.

Residence—Architects R. N. Hockenberry & Company prepared plans for a two-story frame residence for Bert E. Boice, to cost $5000.

Residences—Architects Bridges & Webber prepared plans for two two-story residences, to cost about $3000 each.

Stores and Apartments—Plans have been prepared by Architects Tobey & Mills for a three-story concrete apartment and store building, to be erected at Thirty-fourth and Belmont streets.

Residence—Architects Ertz & Dole prepared plans for a fourteen-room, two-story residence of English design, to be erected in Walnut Park, to cost $14,000.

School Building—Architects Jacobberger & Smith are preparing plans for a brick school building for the Holy Cross Parish, to cost $15,000.

Residence—Architect Edward T. Root prepared plans for a $12,000 residence, to be built on East Sixtieth and Salmon streets.

Bungalow—Architects Roberts & Roberts prepared plans for a five-room bungalow, to be built in Rose City Park.

Apartment House—Architect L. D. Carter prepared plans for a two-story frame apartment house, to be erected on East Thirty-fifth and Hawthorne avenue.

Store and Dairy Building—Architects Roberts & Roberts prepared plans for a two story brick building, to be erected at East Tenth and Burnside streets, at a cost of $13,000.

Flats—Architects Bridges & Webber are preparing plans for a two-story frame flat building on East Sixth and Beech streets.

Apartment House—Architect W. H. Cowen prepared plans for a four-story brick apartment house on Main street, between Thirteenth and Fourteenth streets, to cost about $80,000.

Moving Picture Theatre—Architects Roberts & Roberts prepared plans for a one-story brick building, to be erected on East Fifty-seventh and Sandy Road, to cost $6500.

Dairy Lunch—Architect Aaron H. Gould prepared plans for a lunch room on Third and Morrison streets, to cost $10,000.

Residence—Architects Ertz & Dole prepared plans for a ten-room, two-story dwelling, to be erected in Walnut Park, at a cost of $7000.

Residence—Architect R. J. Roath prepared plans for a two-story, seven-room residence, to cost $4000.

Market Block and Hotel—Architect H. M. Fancher is preparing plans for a sanitary market on First, Second and Yamhill streets, to cost about $75,000.

OREGON.

Business Block—Springfield. Architect J. R. Ford prepared plans for a two-story brick building for F. A. Rankin.

Armory—Roseburg. The County Court of Douglas County levied a tax to raise money with which to build a $40,000 Armory.

Court House—Burns. The County Court of Harney County has levied a tax to raise money with which to erect a modern Courthouse, to cost $50,000.

Lodge Building—Corvallis. The I. O. O. F. is planning the erection of a three-story Temple, to be built this year.

Opera House—Medford. Architect Butz prepared plans for remodeling the Natatorium into a thoroughly up-to-date theatre, to cost $20,000.

Hospital—Baker City. Architect M. P. White prepared plans for a Catholic hospital, to cost $250,000.

Elks Temple—Oregon City. Architect E. E. McClaran has been commissioned to prepare plans for a two-story frame lodge building, to cost about $15,000.

Store and Office Building—Lakeview. Architect F. J. De Longchamps is preparing plans for a three-story steel-frame building for W. F. Heryford.

Remodeling Bank—Salem. The Salem Bank & Trust will remodel their bank building, at a cost of $10,000.

Church—Eugene. The First Unitarian Church has accepted plans for a frame church building.

Library Building—Albany. Architects Tobey & Mills are preparing plans for a one-story brick building, to cost about $15,000.

Theatre Building—Eugene. C. S. Frank will build a two-story brick building, to be used as a moving picture theatre.

School Buildings—Salem. Architect Fred A. Legg prepared plans for two school buildings of pressed brick, to cost about $25,000 each.

Hotel Building—Lakeview. George Wingfield is planning the erection of a three-story fire-proof building, to cost about $250,000.

Hotel—Jordan Valley. Henry Bassett is having plans prepared for a two-story stone hotel building, to cost about $30,000.

Depot—The Dalles. Robert Wakefield, of Portland, has been awarded the contract for a $25,000 pressed brick depot building.

Business Block—Eugene. Architect W. D. Campbell is preparing plans for a two-story brick business block.

SEATTLE.

Elks Club—Architect John Carrigan has prepared plans for an Elks Club, to cost $150,000.

Warehouse and Grain Elevator—Architect F. S. Masters has prepared plans for a two-story frame warehouse and grain elevator for the Albers Milling Company.

Apartment House—Architect V. W. Voohees prepared plans for a three-story fire-proof apartment house, to cost $25,000.

Hospital—Architect J. S. Coote prepared plans for a three-story brick hospital building, to cost about $50,000.

Laundry—Architects Josenhans & Allen have prepared plans for a two-story brick laundry building.

SPOKANE.

Store and Hotel Building—Frances E. R. Linfield is considering plans for a three-story brick hotel building, to cost about $50,000.

Warehouse—H. J. Cook has prepared plans for a six-story brick and concrete warehouse, to cost $75,000.

Hospital Addition—Architects Diamond & Hughes prepared plans for an addition to St. Luke's Hospital, to cost about $40,000.

Church Building—The Norwegian Danish Methodists will erect a three-story church.

Packing House—John Morrell & Company will erect a two-story brick packing house, to cost $15,000. David I. Davis & Company, architects, Chicago.

WASHINGTON.

Yacht Club Building—Tacoma. Architect C. F. W. Lundburg prepared plans for a $30,000 concrete building for the Tacoma Yacht Club.

Hotel—Green River Hot Springs. Architects Kingsley & Eastman are preparing plans for a $250,000 hotel building for the Green River Resort.

Church—Colville. The Congregational Church is contemplating the erection of a $10,000 stone church building.

Church—Ellensburg. The Christian Church will build a $50,000 building early in the Spring.

Lodge Building—Toledo. The Lodge of Eagles has decided to erect a two-story concrete building, to cost about $10,000.

Stable Building—Aberdeen. C. M. Weatherwax will erect a two-story concrete stable, to cost $25,000.

Warehouse—Kennewick. Nathan Thayer and E. M. Sly will erect a fire-proof warehouse, to cost $10,000.

Church Building—College Place. Architect Guy C. Manning, of Portland, is preparing plans for a church building for the Seven Day Adventists, at a cost of $10,000.

Store Building—Lyle. Architects Johnson & Mayer, of Portland, prepared plans for a two-story re-enforced concrete building, to be used for store and hotel purposes.

Y. M. C. A.—Aberdeen. The Y. M. C. A. has taken steps toward raising a $50,000 fund with which to erect an Association Building.

Library—Centralia. Architect Watson Vernon prepared plans for a $15,000 Carnegie library building.

School Building—Ione. The Ione School District voted bonds with which to erect a $25,000 school building.

Evaporating Plants—North Yakima. The Washington Fruit Distributing Association is planning the erection of five evaporating plants near this place, to cost $15,000 each.

Hospital—Aberdeen. The Sisters of St. Dominican are having plans prepared for a two-story stone and brick hospital building, to cost $100,000.

Business Block—Hoquiam. A modern three-story concrete business block, to cost about $30,000, is being planned for this city.

Store Building—Colfax. Architects J. R. Good & Company are preparing plans for a two-story pressed brick business block.

Business Block—Centralia. Peter Burnham is planning to erect a three-story brick building, to cost about $25,000.

Warehouse and Dock—Aberdeen. The Aberdeen Manufacturing Company will build a dock and warehouse, to cost $10,000.

School Building—Sultan. Architect Harlan Thomas prepared plans for a brick school building, to cost $15,000.

School Building—Touchet. Bonds for $25,000 were voted for a one-story brick school building.

IDAHO.

Forestry Building—Moscow. The North Idaho Forestry Association will build and equip a three-story Forestry Building for the State University.

Depot—Nampa. The Southern Heat, Light & Power Company had plans prepared for a one-story brick depot building.

Factory—Lewiston. The Troy Lumber Company will build a $30,000 planing mill at this place.

Factory Building—Lewiston. The Lewiston Cracker & Candy Company will build a concrete factory building, to cost about $30,000.

Brick Block—Bonners Ferry. A. C. Moore has let the contract for a one-story brick building, to cost $6000.

BRITISH COLUMBIA.

Bank Building—Merritt. Architects Honeyman & Curtis prepared plans for a two-story brick and stone building, to cost $25,000.

Hotel—Vancouver. Architects Parr & Fee prepared plans for an eight-story brick hotel building, to cost $75,000.

Apartment House—Vancouver. Architects Townsend & Townsend prepared plans for a five-story brick apartment building, to cost $135,000.

Apartment House—Victoria. Architect Robert Knipe prepared plans for a three-story brick veneer apartment house, to cost $75,000.

Office Building—Vancouver. Architects Russell, Babcock & Rice prepared plans for a ten-story steel and concrete office building, to cost $500,000.

Office Building—Vancouver. Architects Somerville & Putman prepared plans for a nine-story re-enforced concrete office building, to cost $225,000.

Office Building—Victoria. Architect H. S. Griffiths is preparing plans for an eight-story concrete office building, to cost about $230,000.

Office Building—Vancouver. Architects Parr & Fee prepared plans for an eight-story steel and brick building, to cost $85,000.

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AND
Ornamental Brick

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Gray	Tan
Chocolate	Red
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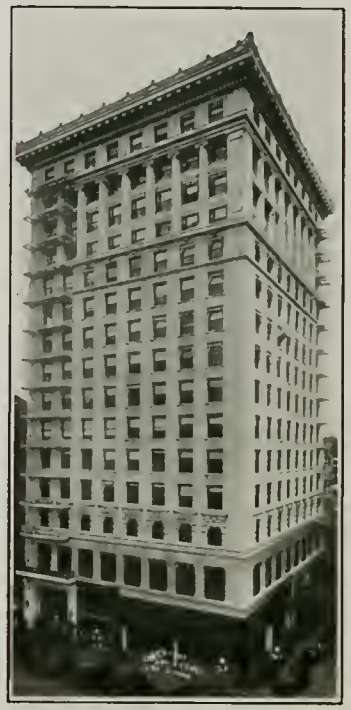

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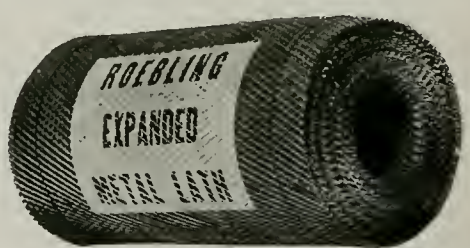

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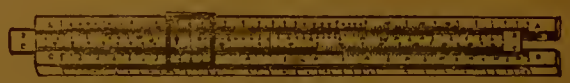

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The Pacific Coast Architect

VOLUME 2 PORTLAND, OREGON, MARCH, 1912 NUMBER 6

COAST PUBLISHING COMPANY, PUBLISHERS

L. J. FLYNN, *Business and Advertising Mgr.* RALPH I. THOMPSON, *Sec. and Treas.*

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The Editor will be pleased to consider contributions of interest to the readers of this publication. When payment for same is desired this fact should be stated Self addressed envelopes must accompany all such contributions.

ADVERTISING RATES ON APPLICATION TELEPHONE MARSHALL 236

Current Comment

Eventually you will subscribe to THE PACIFIC COAST ARCHITECT. Why not start now?

There were 820 building permits issued during February, valued at $1,199,861—a gain of $119,786 over February, 1911. The total valuation of permits for January and February was $2,106,484—an increase over the corresponding period in 1911 of $35,793.

If you are engaged in the sale of any kind of building material, or paints or oils, roofing, builder's hardware, gas or electric fixtures, furnaces, elevators or anything else that goes to make up or furnish a building, you should consider THE PACIFIC COAST ARCHITECT. It is a model advertising medium, with reasonable rates. Let us prove it to you.

A Vigorous Yearling

With this issue, THE PACIFIC COAST ARCHITECT completes the first year of its existence. For a yearling it is most vigorous. We desire to extend our thanks to our advertisers and subscribers for their generous patronage. We admit that they have made the publication possible. In entering upon our second year, we do so with the firm determination of making THE ARCHITECT better each month. We ask the hearty co-operation of our patrons to make this end possible.

Oregon Cedar

Oregon cedar has been adapted to new uses. The Coos Bay Manufacturing Company recently turned out an order of clear cedar sheets 84 inches long by 18 inches in width and three-eighths of an inch thick to be utilized for house paneling and high grade furniture. Furniture men are becoming interested in the adaptability of cedar veneering, three-twentieths of an inch thick, to take the place of felt under carpets. It is claimed for it that it not only repels insects, but is valuable as a floor deadener.

Elects Officers

The Spokane Architectural Club at its recent meeting re-elected Julius Zittel as president. The other officers elected were: George H. Keith, secretary; C. Z. Hubbell, vice-president; F. P. Rooney, treasurer. These gentlemen, together with J. T. Levesque and C. Ferris White, were chosen directors.

Coast Cities Building Statistics

Cold weather in January seriously interfered with building operations all over the country, except in cities on the Pacific Coast. Close investigation of the figures shows that in January, 1912, Los Angeles issued 820 building permits, of the total value of $2,104,875; San Francisco, 384, worth $1,614,608; Portland, 413, worth $990,616; Seattle, 790, worth $506,005; San Diego, 162, worth $219,450; Oakland, 264, worth $388,669; Salt Lake, 27, worth $240,300; Pasadena, 69, worth $105,267; Tacoma, 159, worth $90,996; Sacramento, 74, worth $275,525; Spokane, 104, worth $120,940; Stockton, 29, worth $101,790; San Jose, 27, worth $24,165.

Canadian Cities Building Activity

We herewith present a few building statistics from Canadian cities that are worthy of consideration. It is somewhat surprising to note that Vancouver, B. C., has a large lead over Montreal, yet, perhaps, this is not so much to be wondered at, for Western American cities, in proportion to their population, show the same condition of affairs when compared with the more staid and perhaps less progressive Eastern cities. The spirit of activity and growth prevails in Western cities to a far greater degree than in those of the East and the farther West one goes the more this is true. In 1910 Vancouver's building total reached $13,106,000, and in 1911, $17,652,000. For the same years Montreal shows, respectively, $15,713,000 and $14,580,000, revealing that Vancouver exceeded that city last year by $3,072,000. Toronto, in 1911, erected buildings to the value of $24,374,000, a gain of $3,247,000. In 1910 Winnipeg's building total was $15,106,000 as against $17,652,000 in 1911, a gain of $2,546,000.

Industrial Publications

The N. & G. Taylor Company, of Philadelphia, announces in its monthly publication, *Roofing Tin*, for February, that beginning with January, 1912, it adopted the exclusive and registrable name of "Target and Arrow" on the sides and ends of boxes containing its superior roofing tin. This symbol protects equally the buyer and architect seeking for dependable roofing tin.

Philadelphia Chapter, A. I. A.

ANNOUNCEMENT is herewith made of the appointment of the committee on public information of the American Institute of Architects. It is as follows: D. Knickerbacker Boyd, chairman; Glenn Brown, Frank C. Baldwin.

You will observe in the resolution which was unanimously adopted by the forty-fifth annual convention in Washington, and which authorized the creation of this committee (a copy of which concludes this letter), that the creation of a committee on public information in each of the chapters throughout the country is one of the next steps in the Institute's propaganda. This, however, will be a matter that will rest with each chapter.

There are thirty-two chapters, as follows: Atlanta, Baltimore, Boston, Brooklyn, Buffalo, Central New York, Cincinnati, Cleveland, Colorado, Connecticut, Dayton, Illinois, Indiana, Iowa, Kansas City, Louisiana, Louisville, Michigan, Minnesota, New Jersey, New York, Philadelphia, Pittsburg, Rhode Island, San Francisco County, Southern California, Southern Pennsylvania, St. Louis, Washington, Washington State, Worcester, Portland, Ore.

Some of these chapters already have committees on public information, the same having been formed during the past year or so, probably as a direct result of the recommendation made by the Philadelphia Chapter, which has had a committee on public information for the past couple of years. Those which I know of at the moment are:

Boston Chapter—W. H. Kilham, chairman; William H. Brainerd, secretary; Robert P. Bellows, Joseph E. Chandler, Louis C. Newhall.

San Francisco Chapter—T. J. Welsh, Chas. F. Mau, J. Cather Newsom, Wm. A. Newman.

Philadelphia Chapter—D. Knickerbacker Boyd, chairman; John T. Windrim, George I. Lovatt, John Molitor.

The Southern California Chapter I believe has such a committee, and the Southern Pennsylvania Chapter also has a committee, each of three members.

As soon as the remaining chapters create such committees, which it is to be hoped they will soon do, a chain will be formed which will unite them together in a movement for the interchange of information pertaining to the profession itself, as well as for the dissemination of information of a more public nature.

When our committee has organized and has formulated methods of procedure and decided upon the extent of its activities I will be pleased to advise you further.

At that time we will ask your co-operation in the work that lies before all of us for the good of the profession, and it goes without saying that if in the meantime I can be of assistance to you in any matters concerning which your publication is especially interested I shall be very happy to do so if in my power.

Yours very truly,

D. KNICKERBACKER BOYD,
Chairman.

Committee on Public Information, A. I. A.

Resolution Adopted at Forty-fifth Annual Convention.

Resolved, That the board of directors be requested to appoint a special committee on public information, the duties of which shall include the following:

To keep a record of such published matter as may be of interest to the profession and to send to such publications likely to be interested, information concerning the work of the Institute and of the profession.

To request monthly reports on matters of interest to the profession from committees on public information of the several chapters, which chapter committees shall be subcommittees for their respective territories of the Institute Committee.

To inform the press of the country in regard to annual conventions of the Institute, and the work which the Institute is undertaking and has actually performed. To correct through the press popular misconceptions with regard to the practice of architecture and to rectify erroneous printed statements affecting the profession.

To keep constantly before the public the aims, aspirations and accomplishments of the profession through its organized body, the Institute.

Washington State Chapter, A. I. A.

THE REGULAR meeting of the Washington State Chapter, A. I. A., was held at the Seattle Athletic Club, Wednesday, March 6, 1912.

The Committee on Contracts and Specifications submitted some correspondence with the Institute Committee relative to the changes in the contract forms proposed by the chapter. This matter was referred to our committee for consideration and final action.

A letter from the Southern California chapter extending an invitation to our members to visit Los Angeles during the annual meeting of the California State Board of Architects was read, and in view of the chapter's interest in state regulation of the practice of architecture, it was thought desirable to make an effort to have a chapter delegation present if we desired to consider further the subject of a state license law. The matter was left in the hands of the Legislative Committee with instructions to collect data from other parts of the country and report at the next meeting, the Secretary in the meantime making a suitable reply to the invitation from the Southern California chapter.

Mr. Everett, for the Legislative Committee, reported a resolution on the recommendations of the Mayor of Seattle, that plans for city buildings be prepared in the office of the Superintendent of Buildings. The resolution was adopted with a provision that any further disposition of the subject be deferred until the next meeting, on account of a coming change in the city administration.

Mr. Huntington, chairman of the Committee on Civic Design, and Mr. Badgley, who had been designated by the committee to represent the chapter in the formation of the Seattle Garden Club, reported that the Garden Club had effected an organization with considerable enthusiasm. The work proposed was similar to that undertaken in Minneapolis, where 900 acres had been cultivated, substantially increasing the value of this land, as well as beautifying the streets of the city. In the Seattle Club the plan was to get permission to use the vacant lots primarily on the main traffic thoroughfares, cultivating them with grass, flowers, and planting vegetables where conditions would permit. The chapter voted its endorsement of the work of the club and the individual members of the chapter were asked to further support the club by becoming members.

T. H. Collins, of Cleveland, Ohio, is a new addition to the Denny-Renton Clay and Coal Company's force. Mr. Collins has done much paving in the East and is one of the best known paving experts in the country.

What Other Cities are Doing in City Planning

By FRANK LOGAN, Secretary Oregon Chapter, A. I. A.

THE SUBJECT of this talk is "What Other Cities Are Doing in City Planning," it being one of a series of lectures on "City Planning" given under the auspices of the Portland Art Association and the Greater Portland Plans Association.

The object of these lectures is, frankly, to place before the public reliable information which will properly establish the importance of city planning. Some of the previous lectures have had to do with what the City of Portland is trying to accomplish with a scientific plan. This movement is comparatively recent in this locality, and its ultimate success seems not so much a matter of overcoming the opposition of any selfish interests as it is to give the people at large a full understanding of the scope and methods of the plans themselves. By calling your attention to what other cities are doing in this direction we hope primarily to make it clear that city planning is not an innovation of doubtful practicability, but that it is an economic engineering expedient approved by well informed financiers, statesmen, social economists and business men. The fact that every one of the principal cities in the United States today without exception has a tentative plan designed by an expert is in itself significant, and if our own city is to play its part in the development of modern civilization as well as compete in the more practical matters of growth and prosperity it must reckon with city planning.

I will first touch briefly upon some of the cities of Europe, where an older civilization has borne fruit in civic development much earlier than in this country.

The city of Paris is justly considered pre-eminent among modern cities as regards not only beauty but economy and practicability.

One of the earliest important steps towards the planning of modern Paris was begun in 1605. As a medieval city Paris had become congested in order to remain enclosed within the city walls for purpose of defense. In 1605 Henry IV took steps to relieve this congestion by laying out a large open square on the site of a former market place. This was to be used for promenades, festivals and similar large gatherings; and in order that the square might have a suitable appearance he erected residences of harmonious design on all sides; and in order that the result might be preserved he decreed that when these buildings were disposed of to the private owners they should remain forever in possession of the same family, its heirs and descendants.

This square, which exists today as the Place de Voges, is still beautiful and imposing, and has served its purpose with credit for more than three hundred years. Henry's idea of securing architectural harmony by keeping it in the hands of discriminating families was of course primitive and not to be considered today, but the idea that there should be architectural supervision and restriction in our public places is very important and has contributed more than any other towards the successful development of Paris. This is a plan of the Place de la Concorde. It is one of the most imposing open city centers in the world. This was designed in 1772 by the architect Gabriel. About this center are the various government buildings (the Louvre, department buildings, Ministry of Navy, Chamber of Deputies, Champs Elysees, Madeleine and Rue de Rivoli).

By placing the public buildings about the open spaces the appearance of the open space is greatly improved, and the buildings have the advantage of being seen and appreciated from a distance as well as acquiring the freedom and dignity which an open space gives to them. This would seem to be an obvious and elementary expedient, but it has been so undervalued and neglected in this country by public authorities and building committees as to warrant comment. A monumental building in cramped and unsuitable surroundings stamps itself at once as an error which no amount of excellence in the details of the building itself can gloss over. In fact any inherent excellence of the building only serves to *increase* the sense of misfortune which directed its choice of site.

The Rue de Rivoli, noted above, was built by Napoleon I to give to the Louvre and the Tuilleries the isolation due these prominent buildings. He required at the same time that the building fronts facing this street should be of uniform height and style of architecture.

The idea of requiring a suitable style of architecture in the fronts of buildings facing public places was later carried out in various parts of the city, notably the approaches to the City Hall, the Stock Exchange, the Paris Opera House and the Theater Francaise. The height and character of the buildings are in general regulated throughout the city, and especially along prominent boulevards.

The French government has a minister of education and arts who is entrusted with the erection of all government buildings. He has as assistants and advisers a body of ablest architects in France, men who have completed with the highest honors the architectural course in the government school of fine arts.

The general completeness of the civic planning activities in Paris is illustrated by the way in which the Seine River is developed and made one of the most striking features by means of well designed quays and bridges.

It is said that Portland has at present the most unattractive river front of any city in the United States.

London is interesting principally as the exact antithesis of Paris in the matter of city planning. Instead of wide, radial avenues, grouping of public buildings, adequate park systems, fresh air and sunlight, London has for the most part narrow, congested streets, more than its share of slums and crowded tenements, and totally inadequate access to its suburbs. Recently conditions have grown to be such a burden that some relief was considered imperative, and the gigantic task of widening King's Highway through the center of the city was begun.

The method of financing this alteration is particularly interesting to us, as it will probably be found profitable to do the same thing in Portland some day if not even at the present time.

The city of London purchased all the adjoining blocks on both sides of King's Highway for the existing market price before the alteration. It is found that where the street has been so widened and improved that the increase in the value of these adjoining blocks has more than paid for the proportional cost of the alteration.

After the great fire London had an excellent opportunity to dispose itself in a scientific manner; in fact a plan greatly admired at the present time was submitted for that purpose by Sir Christopher Wren, the greatest architect in the land.

The quality of civilization at that period, however, seemed not quite ready to embrace city planning. This error of omission has been multiplying itself ever since in congestion, economic waste and slums.

Before leaving England I want to note one of the most interesting examples of that phase of city planning known as "ideal towns." Port Sunlight is a factory town laid out from its beginning by private commercial interests for the purpose of producing the highest efficiency among its employes.

It was reported at the recent international town planning conference at London that the average child of twelve

years of age at Port Sunlight is thirty pounds heavier and four inches taller than the average child of the same age in the thickly populated districts of Liverpool.

The British Parliament recently saw the light of city planning and passed what is known as the town planning act, which requires that hereafter all expenditures for government improvements in cities must be made in accordance with an approved scientific plan or design which will secure the greatest economy and comfort to its inhabitants in the future as well as at the present.

It seems suitable to mention at this time the great international town planning conference held at London in October, 1910.

This conference was arranged primarily to give England the benefit of the world's advancement in this science up to date. Mr. John Burns, the statesman, Lord Kitchner, of Khartoum, Sir Ashton Webb, John Belcher and other of England's most prominent men were instrumental in securing it. It was attended by the leading authorities on town planning throughout the world, and the report of its proceedings is probably the most important publication on this subject to date.

Germany with characteristic logic and directness is at the present time taking by far more interest in town planning than any other nation. More plans have been made and more actually carried out than in any other country. Beyond this statement I shall not attempt to go further into German work for the reason that the details in themselves are very similar to those of the cities of the United States, which we may note more at length.

Twelve years ago there was not a single plan commission in the United States. To the beauty and arrangement of the World's Fair at Chicago has been attributed the starting point.

The United States government, profiting by this example, took up the development of the city of Washington.

The government appointed a designing board and appropriated $50,000 for making the plans. The plans proved to be along the general lines originally determined upon by Washington and his engineer L'Enfant. Both Presidents Roosevelt and Taft have given this work their support, and Congress has passed an act establishing a National Fine Arts Commission to insure its continued development.

The fortunes of the Spanish War put us in possession of the Philippines with the problem of modernizing the city of Manila. Upon the initiative of Mr. Taft, then secretary of war, a scientific plan of Manila was drawn up and much of it since carried out with striking success.

The city of Cleveland then took up the work. Among the first steps was to pass a law in Ohio permitting cities to employ expert commissioners that shall control this style and location of public buildings. Cleveland then appointed three commissioners at a salary not to exceed $5000 a year.

There was a section of dead property in the Lake Front district near the center of the city. This was purchased and a central plaza laid out. Around it are being built or have already been built the United States government building, the public library, the city hall, the court house and a great railway station and public docks.

In the original state the adjoining property had a very low tax value. After the improvements were made this property became four times as valuable as it had been, consequently the amount derived by the city in taxes was four times as great. This was alone sufficient to pay for both interest and sinking fund on the bonds issued for the entire improvement.

The city of San Francisco was the next to get a city plan. The movement was started by an association of private citizens similar to the Greater Portland Plans Association. The plans were made by Messrs. Burnham and Bennett at a cost of about $25,000.

The city of Chicago now came to the front with one of the most ambitious planning schemes in the world.

The Commercial Club of Chicago started the movement, and the Mayor and Common Council appointed and confirmed a city commission of 400 of the most prominent citizens for carrying out the work.

It is always to be remembered that this work is not to be carried out simultaneously. Most of the great parks and boulevards of Paris existed only on paper for many decades before they were actually built, and then it was accomplished with little expense because the need of them, group by group, had become evident, and the resulting increase in the value of adjoining property paid for them.

In 1903 the city of St. Louis created a public building commission consisting of three architects, without salary, in conjunction with the city controller and the commissioner of public buildings.

Nearly all the public buildings of the city had become outgrown and antiquated.

In the city of Buffalo thirteen railroads entering that city have signed an agreement for a new union depot in connection with a public dock similar to that in Cleveland. This will be the largest collection of railroad tracks in any depot in the country outside of Chicago.

The city of Boston has an art commission appointed by the mayor which controls the purchase of public works of art, and at the request of the city authorities the design and location of public buildings.

In 1907 the civic organizations of Philadelphia secured and published plans for the development of that city.

Minneapolis and St. Paul are working in conjunction towards a great system of parkways. There are located a great number of lakes in that locality, and each is made the nucleus of a park and all are connected by boulevards. The celebrated Minnehaha Falls and the banks of the Mississippi River are included in this system.

The cities of New York, Pittsburg, Baltimore, Denver, Seattle, Los Angeles and San Diego each have a city plan and an organization or commission for its development. The smaller cities that are doing the same thing throughout the country now amount to several hundred.

In conclusion I would submit the idea that city planning is bound to come as a logical development of business sagacity and enterprise, and that logically applied it does not increase the rate of taxation nor invade the rights of private property, but immeasurably increases civic and personal comfort and economy not only for ourselves but our posterity.

Fire Protection Plan

The annual destruction in all American cities of buildings by fire is appalling. In Portland alone the amount consumed by fire in 1911 (partially insured) equaled $904,000, and the insured lost property in the state reached the amount of $1,311,264. Franklin H. Wentworth estimates that one-half of this loss could have been saved by ordinary vigilance.

Portland's fire losses in 1910 on all property insured was $904,000, but the annual loss was greater, for some of it was not insured; the more probable figures of real loss in Portland were about $1,000,000, and that of the whole state $1,500,000. Mr. Wentworth insists that if precaution and vigilance were used, the premium pay-

ments could be reduced 50 per cent, which would save the state $1,800,000 a year.

A campaign of education among commercial bodies throughout the state will be instituted, in order to agitate this question of economy.

Lincoln Memorial

We are in receipt of a communication from Wm. L. Bailey, Secretary of the Pennsylvania State Association of the A. I. A., treating on the proposed "Lincoln memorial." The chapter is opposed to the proposed Gettysburg road, as not a fitting memorial to the Great Emancipator.

Glenn Brown, Secretary of the A. I. A., suggests these objections to the Gettysburg road plan:

First. A roadway is not an individual or intimate expression of appreciation like a monumental structure, and the idea has been opposed by two expert commissions.

Second. A monumental roadway would cost, based upon engineer's estimate for a similar park and roadway to Mount Vernon, $34,000,000, and its annual maintenance, based upon the reports of the New York Highway Commission, would cost about $3,000,000.

The approved memorial of the A. I. A. is as follows:

There is only one logical character of memorial to Lincoln and one logical site for this memorial, those commended by the Park Commission in 1902, since approved officially as the one site and the one form of a memorial to Lincoln by forty experts on three different boards. The memorial, as proposed by the Park Commission, is presented as a portico, charming in its refinement, dignified in its simplicity, on one side overlooking the lagoon, on the other facing the broad Potomac and Virginia hills. From the monument it will be seen, serene and restful, with its beauties reflected in the lagoon. From Arlington it will stand stately and dignified, and from the Potomac, imposing in its purity. Charming distance views will keep its sacred character in view up and down the Potomac, from the hills of Maryland and Virginia. Through the park vistas, from the Capitol and other city heights, it will stand alone, stately and pure, to the memory of Abraham Lincoln.

Advantages of Fireproof Building Material

With the growth in the scarcity of lumber and the increase in the number of fires annually devastating American cities, the advocates of clay building material see in this an opportunity for the advancement of their interests. Extensive clay beds have been opened up and developed, and a great variety of manufacturing products such as brick, hollow tile, architectural terra cotta, etc., are more readily obtainable now than ever before. In the case of clay, we have the raw material, which is practically inexhaustible. Without decrying the use and adaptability of lumber, it is a fact that the greater the number of wooden buildings, the greater the risk of fires and the heavier the amount of insurance.

Notwithstanding the popularity of manufactured clay material, concrete, structural steel, etc., which now enter so largely into modern city building, it is surprising to note that the price of lumber is increasing. There never will come a time in which there will not be a great demand for lumber. The increased cost is due to the enormous demand both at home and abroad, and the constantly decreasing area of forests from which commercial lumber may be obtained. To be sure, the Forestry Bureau is offsetting this to a certain degree by reforestation, but it will be a long time before the timber crop from this reforestation become available. In the meantime, all fireproof building material will naturally become in greater demand every year.

A Novel Letter Box Post

The Postal Department has been considerably annoyed by the poor and inefficient service rendered by the iron letter box posts throughout the country.

Chas. J. Johnson, a letter carrier of Portland, Ore., believes he has solved the problem, and is in a position to offer a post which will withstand the ravages of any climate. The iron posts now in use are subject to rust and after a few years fall over, leaving no support for the letter boxes, besides putting the Government to the expense of erecting a new post. The new posts are made

of reinforced concrete and will prove permanent; they are of hexagon shape, 8 inches in diameter at the bottom, tapering to 6 inches at the top; 4⅜-inch iron rods, tied with strong wire, are used for the reinforcement.

The posts stand 4 feet 6 inches above ground and are 6 feet 8 inches in length. The inventor plans making the posts in a shop and will be able to carry a large number in stock. He has submitted his plans to the Postmaster General and expects to hear of its adoption, as the local officials have highly recommended it.

Tufa, an Adaptable Material

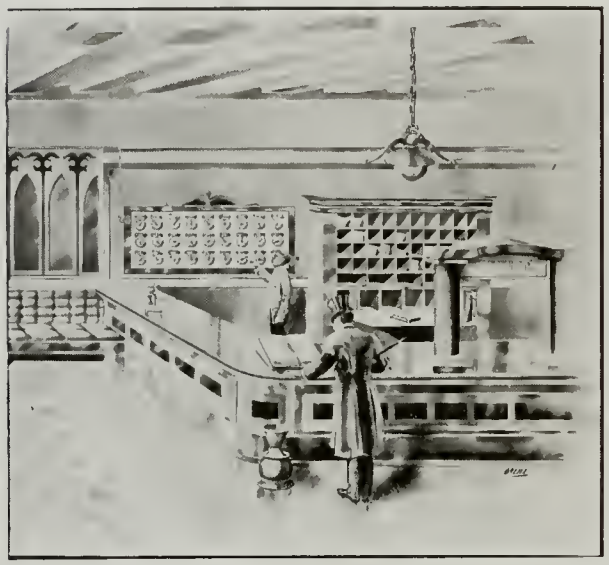
Reference has been made in these columns to the vast and inexhaustible supplies of building stone to be found in Oregon. One of the most unique deposits is a large body of volcanic tufa found in Marion County, covering some 1800 acres. This is owned by H. S. Brinley, a mining engineer.

Geologically tufa is a stone of warm grayish tint into which fine sand and volcanic dust enter as the component parts. The peculiarity of this material is that it is lighter than most kinds of wood, and is as easily workable as wood, making it especially adaptable for dwelling construction.

(Concluded on Page 266)

A Valuable Device

Incorporated under the Oregon state laws, with an authorized capital of $1,000,000, the Automatic Call and Advertising Clock Company of Portland is one of the latest companies out for business. Its officers are: Frank T. Wrightman, president; J. B. Ashby, vice-president; J. A. McFeron, secretary-treasurer; J. M. Rogers, fiscal agent; J. J. Read, superintendent. The home offices of the company are at 170-172 Hawthorne avenue. Unlike so many institutions, this company is not attempting to introduce a fad but a wonderfully useful and practical device.



After a careful investigation of this system we do not hesitate in pronouncing it perfectly practical, and a most valuable adjunct to every progressive hotel. By this device a guest is awakened at any hour he desires by its automatic action electrically controlled. A reset button will stop its ringing. A fire alarm feature which is a part of the system is especially valuable. In case of an alarm of fire from any part of the hotel the clerk, by pressing a button at the side of the dial board, automatically notifies the fire department; at the same time a red light appears and a bell rings in every room, thus notifying each guest instantaneously, and the ringing of the bell can not be stopped except from the office. The life saving feature is only one of the many that stamp the system as one worthy of adoption. In fact there are so many valuable features connected with the device that we predict for the superintendent, Mr. Read, who is so well known to the public through his former connection with the hotel business in the Northwest for many years, the splendid success in installing the system which is due its merits and the efforts of its promoters.

Portland Architect Honored in a National Competition

It is surprising to note the interest taken by architects throughout the country in the Clay Products' Exposition held in Chicago, March 7-12.

The advancement and development of brick and other clay building materials have attracted a great deal of their attention. The best evidence of this interest was manifested in the success of the prize competition inaugurated by *Brick and Clay Record*, of Chicago. The designs submitted cover a wide range of ideas, and it was difficult for the Committee of Awards to decide on the relative merits and select the winners. The committee especially looked into the matter of the availability of the design for the purpose desired. The design submitted by Architect D. Geijsbeek, of the Geijsbeek Engineering Company, of Portland, was specially mentioned by *Brick and Clay Record* as a star exhibit, being a striking design of the application of clay products in architecture.

The Romance of Building Construction

The cave man was content with a hole in the ground. The pioneer carved for himself a pathway through the wilderness. His keen ax felled the forest monarch, and the rude log cabin sufficed for a dwelling. With the advent of the saw the massive walls of logs gave way to lumber, and crude outlines became softened into more artistic forms. Man, once content to pile up rough stones, shaping them into buildings, chinking up the interstices with clay or mortar, as he advanced in knowledge awoke one day to new possibilities. He learned how to chisel stone and shape it into blocks to form a wall, and thus he found that he could build his house secure from the ravages of decay and beautify the exterior of his abode.

The art of building construction is ever in the process of evolution. Under stress of new conditions and modern requirements the old order of things has passed away and newer, better methods have come into being. To him who observes and thinks there is the air of romance about it all. The pick, the spade, the shovel, once all sufficient with which to make an excavation, gave way to plows as being more expeditious. Then came the steam shovel, a monster with cavernous jaws and teeth of steel, whose rapacious maw is unsatisfied with less than a wagon load at a bite.

Framework of timbers no longer suffices. In our great business structures we find vast ribs of steel. The men who fit the parts together mystify while they charm the observers by the agility of their movements. With tiny forges they work perched at dizzy heights. Like modern vulcans they stand in the glow of their fires. Redhot the rivets fly and hiss through air, to be deftly caught in buckets by experts. Nipped by pincers, they are put into place, and the rat-tat-tat of the electrical riveters "heads" them down, and thus are the bones of steel woven into the fabric of the structure-to-be."

"Lighting The Rural Home"

By A. CRESSY MORRISON

Now that the work of the illuminating engineer has become recognized as one of the professions, and especially since the Johns Hopkins University of Baltimore countenanced the subject by establishing a course in illuminating engineering, which proved to be well attended and overwhelmingly successful, there has been reawakened in the architectural field considerable further interest in the better methods of illumination, and perhaps a closer investigation as to the best illuminant to be used in various installations.

One of the problems which has confronted the architect has been the proper and adequate illumination of the country home. The automobile and better means of transportation, and the growing prosperity of the farmer and ranchman has led to an exodus from urban centers into the rural districts, and thousands upon thousands of splend'd homes are now being built where electricity and city gas are not available.

Kerosene as a rural light has served its purpose, and has been said by eminent authorities to have done more for the intellectual uplift of our country by inducing reading and study, where with the flickering candle the eye refused the tiresome task, than any other one advance; and further than this it is undoubtedly true that the steady flame has improved the character of the farm as well as the farmer. Certainly the agricultural bulletins and the agricultural papers, which are filled with instructions for the betterment of the soil and the proper treatment of crops, have been more closely read by the last generation than ever before. The agricultural progress of our nation shows an advance which can in a large measure be attributed to better light in the country home.

If kerosene was a step in advance from the candle, which, compared with all progress of the past, was unparalleled, it is equally true that another step has been taken which gives to the rural home the most perfect illuminant available anywhere. This is acetylene. Acetylene seems to answer all the requirements and the attention which it is receiving is amply justified.

In considering the question of the illuminant to be used, it is necessary above all things that safety shall be first considered. The illuminant selected should be adequate in candle power, convenient, and the quality of the light should be agreeable to the eye, cleanly, and instantly available. It must also be economical, healthful and reasonable in cost of installation.

The safety of the modern acetylene system of illumination has been demonstrated by the adoption of new rules and regulations by the National Board of Fire Underwriters, which permit the inside installation of acetylene generators. The new rules were based upon the investigation of the Board of Engineers of the National Board of Fire Underwriters, who reported to the Executive committee that acetylene, as installed under the rules and regulations of the National board, was safer than the illuminants which it replaced.

Acetylene has advantages of safety which are not considered from an insurance standpoint. City gas practice is used in piping, and the heat generated by the small acetylene flame is but little more than one-tenth the heat generated by ordinary city gas, and in about the same ratio of one-tenth in comparison with kerosene. Kerosene, of course, is a movable unit, as are candles, so that danger to life from the upsetting of movable units is in the case of acetylene eliminated.

Acetylene has no poisonous quality, however, and there is no absolutely no danger from asphyxiation, no case of this kind having occurred throughout the world. The quantity of acetylene escaping into a room through a one-half-foot burner is so small that danger from explosion from this cause is eliminated, and the perfection of the acetylene generator as now constructed under the direction of the Board of Engineers of the National Board of Fire Underwriters, is acknowledged to be such that it is mechanically safe and practically "fool proof."

Calcium carbide is not a hazard, whereas liquid hydrocarbons are a source of constant danger. Hence the question of safety is well settled by the expression of the most authoritative body that could be called upon to consider the subject.

The very small flame of acetylene and its extremely high candle power in proportion to the consumption of oxygen makes acetylene the most healthful of illuminants, with the possible exception of electricity. In this respect there is no comparison with kerosene, gasoline, candles or city gas, as acetylene is far and away the most hygienic.

A one-half-foot burner of acetylene gives approximately 25 candle power of illumination. Acetylene has all the convenience of city gas, and methods of ignition which are adapted to city gas can be applied with equal facility to acetylene.

The question of the cost of illumination is settled by the fact that it compares favorably with city gas burned in an open flame burner at $1 per 1000 cubic feet. The figures given below are for the greater part of the United States, but the cost of carbide on the Pacific Coast runs higher, or about five cents per pound. Other illuminants cost more in the far West, so the ratio holds good. The basis of this estimated cost is plain.

One hundred pounds of calcium carbide costs $3.75. Allowing 25 cents for freight, this leaves calcium carbide 4 cents per pound. While calcuim carbide will yield five cubic feet of gas per pound under laboratory conditions, the government guarantee is that it shall yield at least four and a half cubic feet in a generator. Estimating that only four cubic feet are yielded, the cost per 1000 cubic feet would be $10. Professor Pond in his work on acetylene credits it with twelve and one-half times the illuminating power of city gas. It is, therefore, seen that there is a wide margin allowed, both in yield of carbide and in the yield of illumination, when the claim is made that it equals city gas at $1 a 1000. It compares favorably, candle power for candle power and cost for cost, with kerosene, as acetylene in a clean burner is always burned under the best conditions, whereas kerosene is seldom burned in a perfectly trimmed lamp. Therefore acetylene is economical for the country home.

Questions arise as to the use of acetylene for cooking. When compared with city gas in the city, burned in an ideal gas stove, it costs considerably more, but in the country home the convenience of acetylene for use in the gas stove, especially in summer, and the fact that all the arguments in favor of the city gas stove as regards saving, waste of coal and cost of kindling, which make the city stoves of such marvelous advantage economically, apply, so that the use of acetylene for cooking as an adjunct to the main system and as an adjunct to the country home is unequaled.

The cost of the installation of acetylene here becomes of a great deal of interest. Taking an average country home of from seven to ten rooms, furnished with carefully designed and well polished gas fixtures, the cost of installing acetylene would be about as follows: A 25-light generator (and by this is meant a generator capable of pro-

ducing with one charge sufficient acetylene to burn 25 lights, giving approximately 25 candle power for ten consecutive hours) would cost $120. The burners would cost $5, the fixtures (including glassware) $35, the piping $30, freight, drayage and incidentals $10. A generator of double capacity, that is, a 50-light generator, has many distinct advantages in that it will generate sufficient acetylene so that the question of recharging will occur at double the intervals, and, further than that, should it ever occur that all the lights were lit at once there would be no danger of the supply of acetylene being exhausted. Such a generator would cost $50 more—that is, $170—making the total cost of an acetylene plant of the highest quality for a country home $250.

The figures given above are based on the assumption that very artistic fixtures and good glassware will be adapted for the better rooms, and that simple but artistic fixtures and first class glassware shall be used throughout the rest of the house. The piping is ordinary city gas piping.

The installation of the piping and fixtures can be accomplished by an ordinary careful workman, and can be done in from three to five days, and in such a manner that the piping is not visible, nor will the introduction of an acetylene system inconvenience the family.

The acetylene generator is shipped completely set up and has no intricate parts to be adjusted. It can be placed in the basement or in a separate building if so desired. Generators are usually accompanied by complete instructions, which are so simple that they can be followed by an ordinary workman without difficulty.

It has been found in actual experience that a house which is equipped with 25 burners will not burn on an average more than two burners at a time, and, according to the season, will use these burners for only a few hours each day. A 25-light machine has therefore practically 250-light hours, and should last without recharging for ten days or two weeks and often longer.

A larger capacity machine, such as is described as a 50-light machine, would probably need recharging under ordinary conditions about once a month.

The recharging is accomplished by very simple means, and the residue from the generator is merely slacked lime. This has been found useful for all the ordinary purposes for which lime is used, including that of fertilization, and in this direction has proved very valuable for the garden.

It is, therefore, possible by the use of acetylene to have a complete individual lighting plant always ready for instant use. In the country all the conveniences of city gas, with many advantages over city gas, can be had by the country dweller today in acetylene illumination, the nearest approximation to sunlight yet devised in artificial illumination, with a distinct advantage as regards safety, at a moderate cost and to his infinite satisfaction.

Some 200,000 installations in country homes throughout the United States are a demonstration of the appreciation with which these facts have been received, and it is notable that wherever acetylene has been introduced into a community the neighbors and residents who can afford a private installation have hastened to secure the advantages which each initial unit so clearly demonstrates.

(Concluded from Page 263)

It has an ultimate crushing strength of 139 tons to the square foot. Mr. Brinley proposes to develop the property by effecting railroad connection through means of a spur track to place the product upon the market. In 1890 a monk attached to the Saint Benedict's Abbey at Mt. Angel, Ore., constructed a house of tufa. It still stands in as perfect condition as when first erected.

"Thornewood"

ON THE east shore of American Lake, Washington, about thirteen miles from Tacoma, stands the beautiful country home of Mr. Chester Thorne.

On entering the grounds through the gate of a quaint lodge one gets an impressive view of the dignified house standing in the distance, flanked by stately survivors of the "forest primeval," with occasional glimpses of the shimmering waters of the lake beyond, and a large and most attractive old-fashioned garden forming the foreground. On arriving at the building and looking to the north and west a broad, undulating lawn, broken in places by clumps of spreading trees, slopes gently to the water's edge; while turning to the east, one is charmed by the wealth of blending colors of a formal garden skillfully placed on an axis with Mount Tacoma, which in the distance rises transcendent in its ever changing glory.

The building, which is of fireproof construction, is in exterior treatment of the earlier Tudor period, the walls being built of rough cut brick in shades of red and brown, laid in English bond with raked joints, and relieved by buff Tenino sandstone mullions, arches, oriel, bays, railings, gable copings and carved chimney tops.

The roof is of unglazed tiles, which in color are of the several shades common to the brickwork. The metal casements throughout are of English make, and their small, rectangular lights, divided by heavy lead muntins, are broken here and there by charming bits of truly ancient painted glass, while the terrace, porches, balcony and *loggia* are paved with Moravian quarries, broken by an ocasional cluster of interesting reproductions of old relief tiles in colors.

The main entrance to the house is from the south and on grade, with the typical vaulted porch and massive oak doors opening into the Elizabethan hall, which is paneled to the ceiling with rich brown oak, and has a large stone-faced fireplace with a wonderful old, elaborately carved over-mantel, and a beautiful staircase with high, graceful newels winding up through a central bay, is lighted by an oriel window with stone mullions—all outside openings in the room being treated in a simlar manner.

The ceiling, rich in ornament and broken by two large plastered beams, is of a soft old ivory color.

From the hall the large Adam drawing room is reached through two deep paneled arches, and one is at once impressed with its proportions and delicate treatment in detail and color, and with its fine outlook through a large bay at either end, and again through French windows opening into the spacious *loggia*.

At the left of the entrance a concealed door in the paneling opens into a quaint library which is lighted by a large mullioned window on the south, opposite which is a recessed stone fireplace, all of the available wall space from floor to ceiling being utilized by recessed book shelves. The richly carved oak finish and ornamental plaster ceiling of this room are of a little later period than that of the hall.

The Queen Anne dining room, with its north and east exposures, commands a magnificent view of the lake through its two large bays. The walls of this room are also finished with oak divided into long, wide panels with carved cornice characteristic of the style, and a heavy plaster moulding in bold flower and fruit design forms a large oval panel on the ceiling.

The bedrooms on the second and third floors, with their luxurious bathrooms, are large and bright and charmingly quaint in their treatment of decorations and furnishings.

The servants' wing on the west is excellent in arrangemen and complete in equipment.

Thornewood. Country Home of Mr. Chester Thorne, Tacoma, Wash.
Cutter and Malmgren, Architects, Spokane, Wash.

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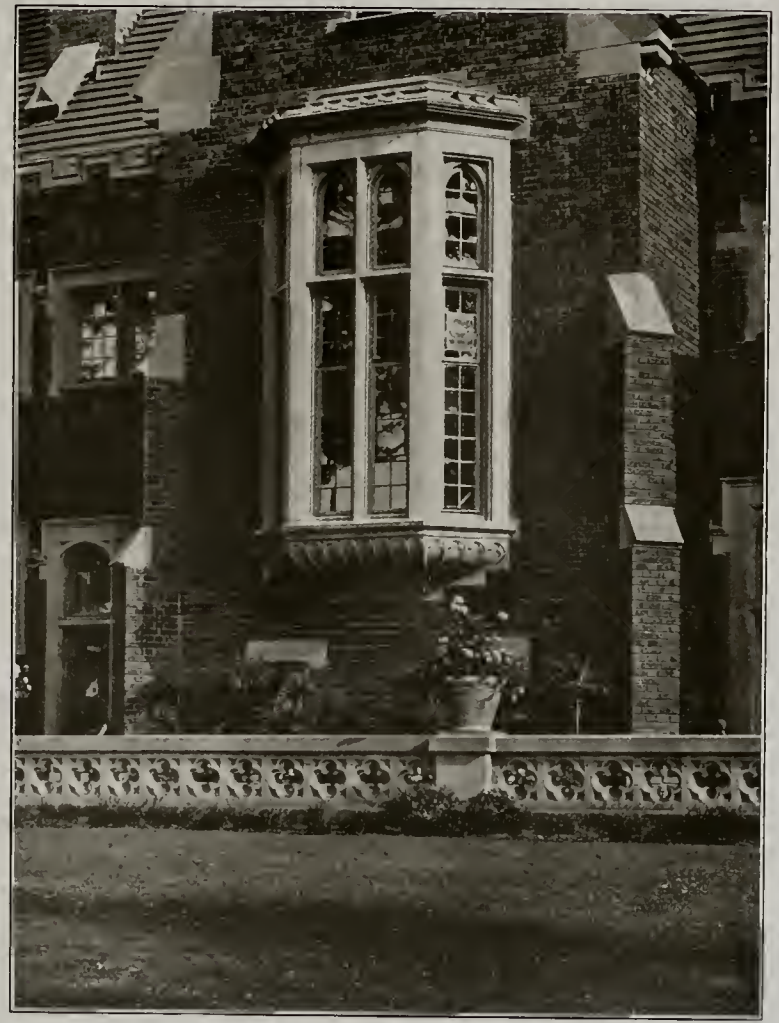

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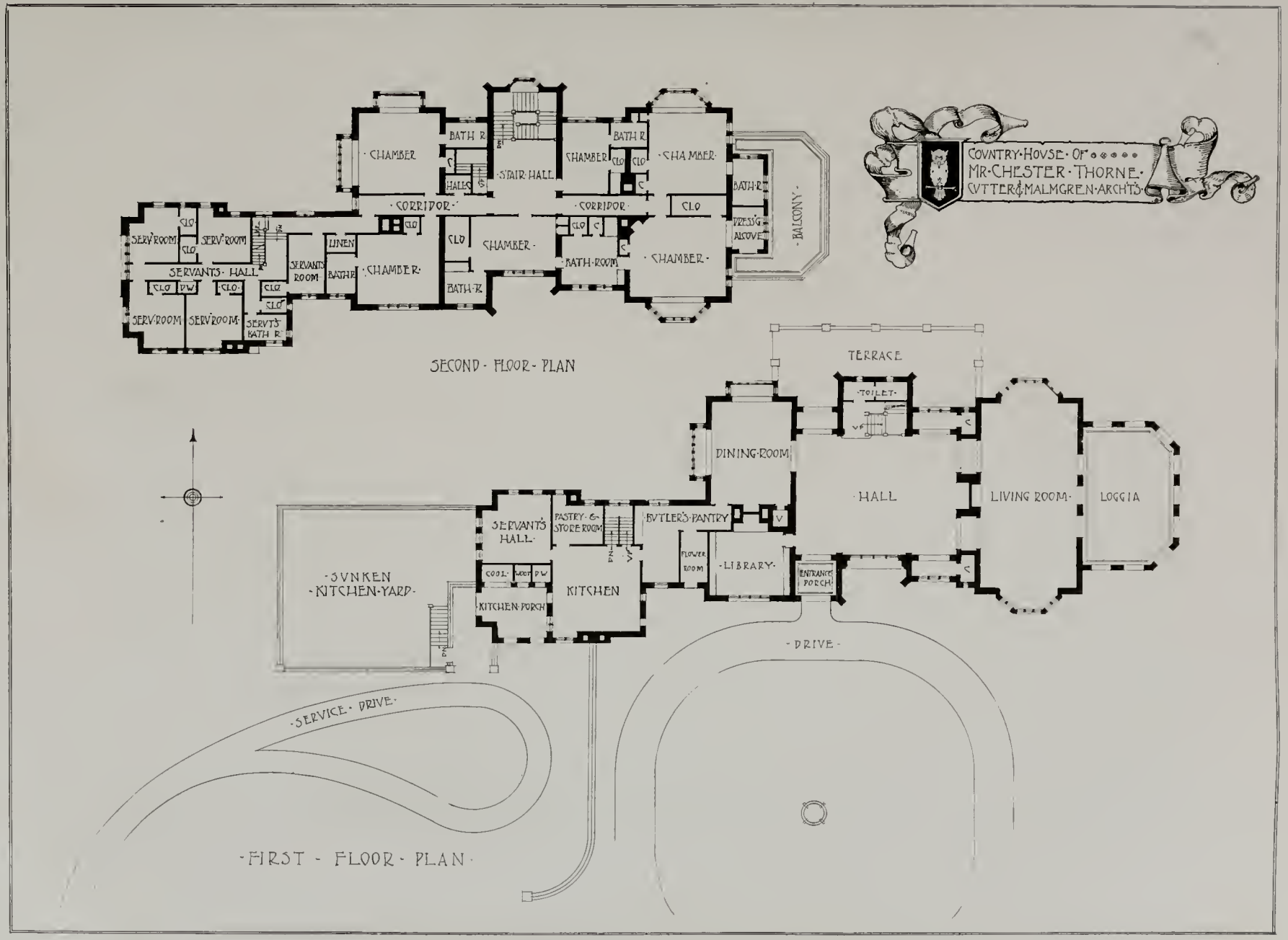


PACIFIC COAST ARCHITECT
MARCH, 1912

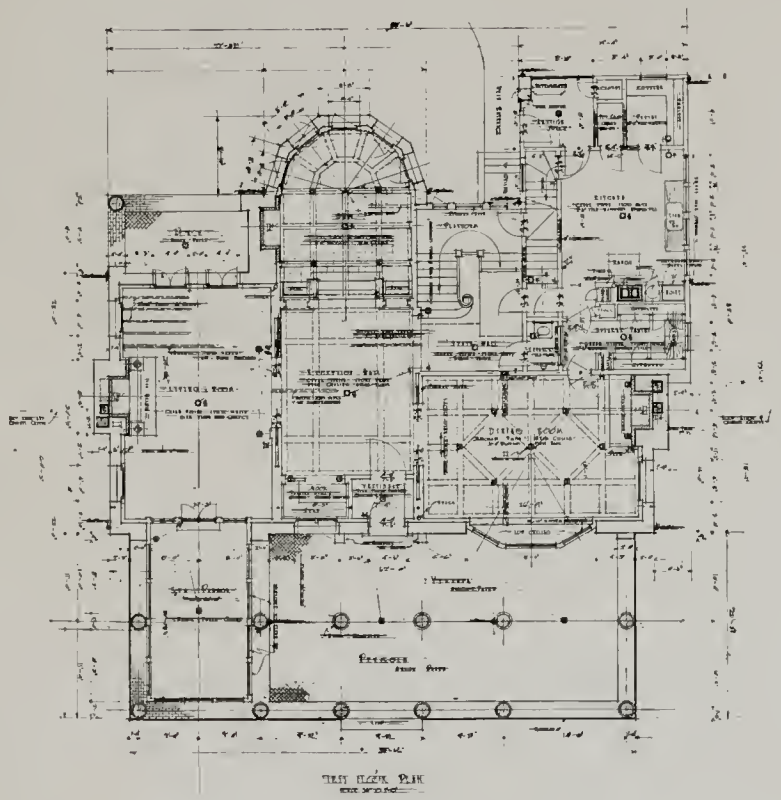
Elevation, Residence, Mr. J. A. Veness, Portland, Oregon
Emil Schacht & Son, Architects, Portland, Oregon

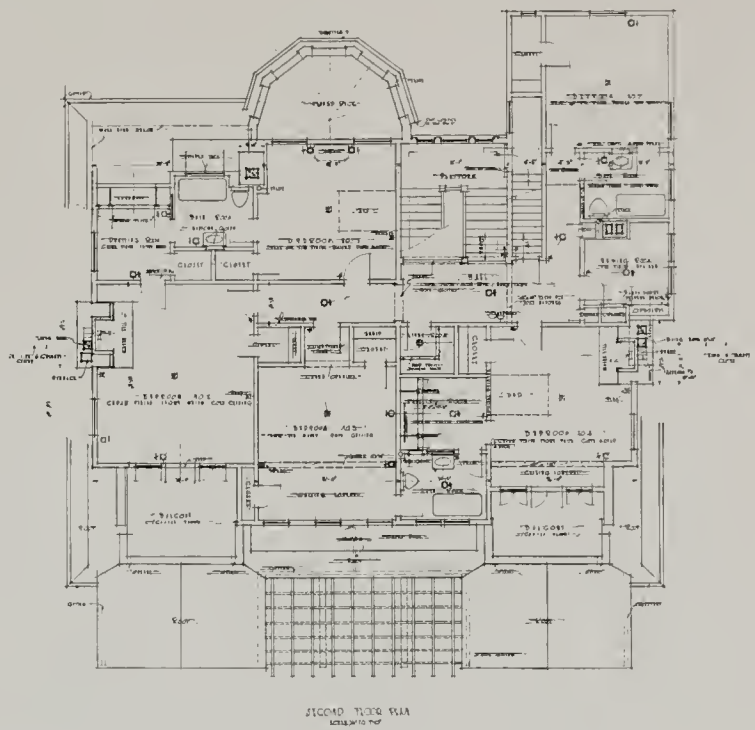
Dining Room, Residence, Mr. J. A. Veness, Portland, Oregon
Emil Schacht & Son, Architects, Portland, Oregon

Living Room, Residence, Mr. J. A. Veness, Portland, Oregon
Emil Schacht & Son, Architects, Portland, Oregon

Sun Room, Residence, Mr. J. A. Veness, Portland, Oregon
Emil Schacht & Son, Architects, Portland, Oregon

Piazza, Residence, Mr. J. A. Veness, Portland, Oregon
Emil Schacht & Son, Architects, Portland, Oregon





Floor Plans, Residence, Mr. J. A. Veness, Portland, Oregon
Emil Schacht & Son, Architects, Portland, Oregon

PACIFIC COAST ARCHITECT
MARCH, 1912

Rapidly Increasing Membership

The latest improvement in the ever progressive Builders' Exchange of Portland is the combination mail box and plan drawers, which are furnished free to members. These boxes virtually give every member a lock desk and are a great convenience.

The following well known firms have been admitted to the exchange since January 1st: Sherwin-Williams Paint Co., C. W. Nottingham, Frank Q. Hart, Edward Kilfeather, Geo. Langford & Sons, W. T. Bischoff, Geo. Campbell, Baily & Smith, J. A. Vehring & Son, Parelius Mfg. Co., Kelley Bros. Inc., T. B. M. Summerville, A. W. Curry, J. G. Kilgreen, J. F. Hand, F. E. King, F. H. Brandes, N. G. Patterson, E. M. Miller, Anton Teller, Max Lystrup, F. E. Harmar, Northwest Steel Co., Crosby & Barton, Thos. H. Burgoyne, Vom Cleff & Lundy, D. E. Campbell.

The exchange has just started a hurricane campaign for new members. Three valuable prizes will be given to the members bringing in the greatest number of acceptable applications. The first a $150 diamond, the second a $75 gold watch and the third a $25 pair of sleeve buttons. These prizes are to be awarded as soon as the membership reaches 300. At the present rate of increase the contest will soon be over.

The Hercules Sandstone Company

One of the leading industries of the Pacific Northwest is the plant of the Hercules Sandstone Company at Tenino, Wash. The company operates two large quarries, each with a totally different output. Hercules quarry No. 1 produces channeled or steam-sawed slabs and blocks. From quarry No. 2 rubble stone is produced, workable for various purposes. From this latter quarry 700 tons daily were produced in 1911 for the jetty at Gray's Harbor. The government contract calls for 1200 tons daily during 1912.

At quarry No. 1 a costly steam plant has been installed to saw stone out of the native mountain rock. This stone has wonderful tensile strength. At the Alaska-Yukon Exposition a slab 12 feet 4 inches long, 4 feet 8 inches wide and ¾ of an inch thick was put to a severe test. It was bent eight inches without causing a crack or fracture in the stone.

A large number of important buildings throughout the Pacific Northwest are splendid monuments to the products of this famous quarry.

All things being equal, architects would do well to denominate Hercules stone in their specifications, not only as an encouragement to home industry, but because it is equal if not superior to other stone products.

Builders' Exchange Action

At a meeting of the Builders' Exchange held recently the present employers' liability act and the mechanic's lien law were the subjects of discussion.

The meeting was unanimous in condemning the employers' liability act as oppressive, unjust and arbitrary. It was the consensus of opinion that the abrogation of the mechanic's lien law would benefit the building industry and the responsible contractors. Messrs. R. A. Hume, building material, J. C. Bayer, sheet metal contractor, and O. E. Heintz, of the Pacific Iron Works, were appointed a law and legislative committee to take up the matter. It is understood that they will act in conjunction with the committee recently appointed by Governor West to investigate the same laws.

Personal Notes

Architect Chas. G. Badgley, with offices formerly in the White Building, Seattle, has moved to the Alaska Building.

E. D. Timms, of Timms, Cress & Co., has returned from Soap Lake, Washington, where he has been recuperating the past few weeks.

Architect Ellis F. Lawrence was a recent visitor to Spokane, Wash., on business.

Architect E. E. McClaran, 525 Lumber Exchange Building, has returned from a business trip to Eastern Oregon.

E. M. Hamilton, manager of the local office of the Mosler Safe Company, is on a business trip to the home office at Hamilton, Ohio.

Mr. David Lane is now acting as sales manager for the Western Clay Company.

Walter B. Beebe, president of the Northwest Steel Company, has returned from a month's trip spent in the Eastern States.

Architect Lewis I. Thompson has returned after spending six weeks in New York City.

Mr. B. R. Smith, manager of the Western Clay Company, is on a month's trip through California.

Atholl McBean, secretary of Gladding, McBean & Co., of San Francisco, was a recent Portland visitor on business.

C. C. Smith, formerly sales manager of the Western Clay Company, has returned from a four weeks' trip to Chicago, returning by Los Angeles and San Francisco.

The Western Clay Company will furnish the tapestry effect brick for the Brady residence of this city.

The Portland Cement Company announce the removal of their office from the Yeon Building to 803 Lewis Building.

Mr. W. Marbury Somerville, architect, with offices in the White Building, Seattle, Wash., has returned from a month's business trip to Montreal and Quebec.

Mr. Henderson, formerly with the Western Building Material Company, is a new addition to the sales force of R. A. Hume, dealer in building materials, Lumber Exchange Building.

Mr. Gustav Kahn, president of the Trussed Concrete Steel Company of Canada, with headquarters at Toronto, was a recent caller at the local office of the Trussed Concrete Steel Company on his way to Vancouver, B. C.

S. B. Cooke, local manager of the Holmes Disappearing Bed Company, is in San Francisco. From there he will leave on a month's business trip to New York City. Mr. Lawrence Holmes, president of the company, was called from the British Columbia field to take care of the local field while Mr. Cooke is in the East. Mr. Holmes reports business very good in British Columbia.

William D. Edwards, mechanical engineer, has opened an office at 1115 Wilcox Building. He is prepared to furnish plans for heating, ventilating, electric wiring, plumbing, power plants, etc. Mr. Edwards' work speaks for itself, as is evidenced by many modern buildings here and elsewhere.

The Pacific Coast Architect received a pleasant call recently from Edwin V. Cobby, architect, of San Francisco, connected with the engineering department of the Pacific Telephone and Telegraph Company. Mr. Cobby was in the city in connection with the proposed fourteen-story $500,000 building for the company, permit for which was issued March 6th.

Howell L. Shay, East Sixtieth and Twenty-eighth avenue, northeast, Seattle, now taking a post-graduate course in architecture at the University of Pennsylvania, was one of the first prize winners in the competition of the Society of Beaux Arts Architects for 1912, just announced in New

York. He is the first man west of Chicago to receive the honor since the competitions were established a decade ago.

The live wire Pacific Coast representative, J. A. Drummond, of the N. & G. Taylor Company of Philadelphia, manufacturers of roofing tin, was a recent caller at the office of the PACIFIC COAST ARCHITECT. The N. & G. Taylor Company carry stocks with E. P. Jamison & Co., Seattle; Occidental Warehouse of Portland, the Haslett Warehouse of San Francisco and the California Cornice Works at Los Angeles. The headquarters for the entire Pacific Coast will be at San Francisco.

Trade Notes

Ertz & Dole, architects, 510 Northwest Building, have enlarged their office.

The Raymond Concrete Pile Company announce their removal from 626 Worcester Building to suite 807-808, Wilcox Building, Sixth and Washington streets.

W. S. Barnes, formerly with F. T. Crowe & Co., is now associated with King & Cowing, 415 Yeon Building.

Architects Goodrich & Goodrich have moved from the Yeon Building to 326 Abington Building.

E. L. Knight & Co., 29 East Morrison street, have installed a new display room where they have a fine line of originally designed electric fixtures on display.

The Mission Marble Works, 151 Union avenue, north, have just finished the erection of a Padrara Mexican onyx mantel in the residence of Captain McCann at Hood River.

King & Cowing have opened an office at 415 Yeon Building as manufacturers' agents. They have secured the Northwestern selling agency for several popular lines of building materials.

April 10 and 11, 1912, the second annual convention of the Architectural League of the Pacific Coast will be held at the Hotel Angelus, Los Angeles, Cal.

The P. L. Cherry Company has just finished installing the Sunburst prisms for the Gambrinus Brewery.

The Northwest School Furniture Co. are furnishing the fixtures in the Ladd & Bush Bank at Salem, Ore. Fixtures and interior finish all to be in mahogany.

The Washington Brick, Lime and Sewer Pipe Company of Spokane, Wash., have the terra cotta all manufactured and ready for delivery on the court house, which amounts to 600 tons, and will be ready to start delivery of the terra cotta on the Masonic Temple at Salem, Ore., April 1st.

The O. W. M. firm of architects and engineers, 505 Gerlinger Building, has dissolved. Guy C. Manning, manager of the firm, has taken over the business and has an office at 508 Gerlinger Building.

W. P. Fuller & Co. will furnish all the plate glass for the Lipman & Wolfe Building, Fifth and Washington streets. This is the largest plate glass contract ever let in Portland.

Victor S. Persons, formerly coast manager for the Concrete Steel Products Company, is now associated with the L. A. Norris Company, with headquarters in San Francisco.

Robert G. McPherson, treasurer of the N. G. McPherson Company, has returned from a two months' trip. While away he visited the Isthmus of Panama and made a tour of Southern California.

Mr. Schiffer, manager of the Lithic Manufacturing Company, 625 Yeon Building, reports having just finished laying the Raecolith floors in the deaf and blind schools at Vancouver, Wash., and has the contract to lay Raecolith floors in the Lincoln High School and 70,000 square feet of Raecolith flooring in the new insane asylum at Pendleton, Ore. Has just finished laying the Raecolith floors in the Fernwood school.

We are in receipt of a celluloid folding rule distributed by the Armstrong Machinery Company of Spokane, Wash., manufacturers of ice and refrigerating machines, which is unique and convenient, and they will be pleased to mail it to refrigerating engineers, architects or others interested.

Fred C. Cook has recently become the general manager of the Hester system of store front construction within the following territory: Washington, Oregon, California, New Mexico, Arizona, Utah, Nevada, Idaho, Montana, Alaska, Hawaii and the Philippines. Having just returned from California, Mr. Cook reports the general outlook for building in that state and Arizona as very favorable for this year.

The Washington Brick, Lime and Sewer Pipe Company of Spokane, Wash., will furnish through their local representative, Mr. C. T. W. Hollister, one-half million face brick for the Reed College, which will be their celebrated Mission Reds; delivery now started. Will also furnish the Mission Red brick and white full glazed terra cotta for the Oregon Hotel, which will be 400 tons, delivery to start April 1st.

A Resume

Recent items selected from the daily advance reports of The Pacific Coast Architect:

PORTLAND.

Business Block—Architect E. E. McClaran prepared plans for a two-story brick business block, to be erected in Gresham.

Chicago Architect Frederick S. Allerton prepared plans for a church building for the Sacred Heart Parish, to cost about $5000.

Residence—Architect Ellis F. Lawrence prepared plans for a twelve-room, two-story residence, to cost $12,000, for Judge E. C. Bronaugh.

Residence—The architectural firm of Roberts & Roberts prepared plans for an eight-room frame residence for R. L. Pollack.

Residence—Architect Ellis F. Lawrence prepared plans for a modern eight-room residence to be erected on Portland Heights for Mrs. Strong.

Lodge Building—Architect Ernest Kroner prepared plans for a two-story building, to be erected in St. Johns by the Odd Fellows.

Residence—The architectural firm of Ertz & Dole prepared plans for a two-story frame residence for Clara L. Saunders.

Remodeling—Architect E. E. McClaran prepared plans for the remodeling of the building on Washington street, near Seventh.

Hotel—Architects Emil Schacht & Son prepared plans for a two-story concrete hotel building, for the Mt Hood Brewery, on Fourth and Stark streets.

Dormitory—The architectural firm of Doyle, Patterson & Beach prepared plans for a two-story brick Women's Dormitory, to be erected at Monmouth.

Church—Architect H. N. Black prepared plans for a $25,000 stone church for the Trinity Methodist congregation.

Business Block—Architect E. E. McClaran prepared plans for a two-story brick building, to be erected at The Dalles, for Fred Lemke.

Hotel—Architects Roberts & Roberts prepared plans for a two-story frame hotel building, to be erected at Nehalem.

Laundry Building—Architect Aaron H. Gould is preparing plans for a three-story brick building for the American Laundry Company.

Business Block—Architects Whidden & Lewis prepared plans for a three-story brick store and hotel building, to be erected on Second and Couch, to cost $12,000.

Store and Flat Building—Architect Frederick S. Allerton prepared plans for a two-story frame store and flat building, to be erected on Macadam Road.

High School—Architect E. E. McClaran is preparing plans for a two-story pressed brick high school building, to be erected at Athena.

Y. M. C. A—The architectural firm of McNaughton & Raymond prepared plans for a $37,000 stone building for the Baker Y. M. C. A.

School House The Newcomb Engineering & Construction Company prepared plans for a two-story frame school building, to be erected in Columbia County.

Hotel Building—Architects Bennes & Hendricks are preparing plans for a three-story brick store and hotel building, to be erected on Sixth and Davis streets.

Residence—Architect J. S. Adkins prepared plans for a colonial residence, to cost $6000.

Hotel Building—The Oregon Architectural & Engineering Company prepared plans for a two-story frame hotel building for the Elmore Park Company, to cost $12,000.

Remodeling—Architect E. E. McClaran prepared plans for the remodeling of a store building on Morrison near Third.

School House—W. W. Lucius prepared plans for a two-story school building to be erected at Mayggers, Wash.

Residence—Architect Lewis I. Thompson prepared plans for a seven-room colonial house for A. A. Schull in Rose City Park.

Bungalow—Architect J. B. Clark prepared plans for a seven-room bungalow to be built in Vernon.

Apartment House—George West & Sons designed a two-story frame apartment house, to cost $12,000.

Parish House—The Oregon Architectural & Engineering Company prepared plans for a two-story frame parish house, to be erected at Newport, Ore., to cost $5000.

Country Homes—Architect Lewis I. Thompson prepared plans for four model country homes and grounds for Parkrose.

Bank Building—The architectural firm of R. N. Hockenberry & Company are preparing plans for a reinforced concrete building for the Philomath State Bank.

Mining Building—Architects Bennes & Hendricks are preparing plans for a three-story brick building for the Oregon Agricultural College.

College Building—The architectural firm of Emil Schacht & Son is preparing preliminary sketches for the building to be erected by the Benedictine Sisters at Mt. Angel.

Bungalow—Architect Charles W. Henn prepared plans for a seven-room bungalow, to be built in Laurelhurst.

Store Building—Architects R. N. Hockenberry & Company have in preparation plans for a one-story brick store building, to be erected in Forest Grove.

Office Building—Architect Edwin V. Cobby, of San Francisco, prepared plans for a fourteen-story, fireproof building, to be erected by the Pacific States Telephone and Telegraph Company, at a cost of $500,000.

Store Building—Architect Ernest Kroner prepared plans for a one-story store building, to be built at Forest Grove.

School Building—Architects Whitehouse & Fouilhoux have been commissioned to prepare plans for a $200,000 pressed brick school building.

Business Block—Architect D. Delos Neer is preparing plans for a five-story white pressed-brick business block, 31x110, to be erected in La Grande by J. E. Foley.

OREGON.

Bank Building—Springfield. The Farmers' and Merchants' Bank is having plans prepared for a two-story fireproof building, to cost $18,000.

City Hall—Medford. Plans for a two-story brick building have been submitted to the City Council for approval.

Hospital—Heppner. The Catholics of Heppner are planning the erection of a modern $30,000 stone hospital building.

School Building—Roseburg. Architect Dow prepared plans for a two-story brick school building, to cost $25,000.

School Building—Milton. School district No. 67 voted a $7000 bond issue with which to erect a concrete school building.

Business Block—Springfield. Architect John Hunzicker prepared plans for a two-story reinforced concrete building for Bruno Vitus of Eugene.

School Building—Tillamook. The school board bas authorized a bond issue with which to build a $25,000 fireproof school building.

Business Block—Roseburg. J. H. Booth is having plans prepared for a three-story brick store and office building, to cost about $30,000.

Court House Annex—Hillsboro. The County Court of Washington County is considering plans for an annex to the court house, to cost $35,000.

Garage—Cresswell. Schmitt Bros. have plans prepared for a one-story concrete garage, 100x120.

Depot—Salem. Mrs. Fannie E. Hubbard will erect a two-story brick building, which will be leased by the Oregon Electric for depot purposes.

Business Block—Salem. A three-story brick store and office building will be erected by F. N. Derby and P. J. Lofky.

Express Building—Roseburg. The Wells-Fargo Company has accepted plans for a one and one-half story brick building

Hotel—Albany. J. C. Hammel is having plans prepared for a six-story concrete and pressed-brick hotel building, to cost $50,000.

Business Block—Salem. The Roth Grocery Company will erect a modern three-story brick building, to be used for store purposes and offices.

Lodge Building—Albany. The Knights of Pythias will erect a modern three-story lodge and office building.

Depot—Lakeview. The Nevada-California & Oregon Railroad will soon begin the construction of a $15,000 pressed brick and stone depot.

Church—Eugene. Work will soon be resumed on the $75,000 brick church building being erected by the Methodists.

Library—Gresham. A site has been offered and application made to the Carnegie Library Fund for a $10,000 building.

Business Block—The Dalles. Mrs. Matilda M. Baldwin contemplates the erection of a two-story brick store and office building.

SEATTLE.

Store Building—Architects Bebb & Mendel have prepared plans for a three-story brick and reinforced concrete building, to cost $50,000.

Store Building—Architect G. S. Kerchner prepared plans for a two-story brick building, 40x70, to cost $10,000.

Office Building—Architects Parr, McKenzie & Day are preparing plans for a nine-story office building, 25x120, to cost $100,000.

Wholesale House—J. M. Buttnick prepared plans for a one-story reinforced concrete building, to cost $15,000.

Mill—Architects Bebb & Mendel are preparing plans for a six-story reinforced concrete mill building, to cost $100,000.

Club Building—Architects Howells & Stokes are preparing plans for a building to be erected for the College Club.

Foundry—The Great Western Smelting & Refining Company will erect three large reinforced concrete buildings at a cost of $200,000.

Convent—Architect G. S. Badgley prepared plans for a $300,000 convent for the Madams of the Sacred Heart at Point Grey.

Apartments—Architects Quant & Creutzer prepared plans for a three-story pressed brick apartment house, to cost $35,000.

Hotel Annex—Architect C. Alfred Brietung has been commissioned to prepare plans for a 200-room annex for a hotel building at Bellingham.

SPOKANE.

Apartment House—Milliard S. Hosea will erect a two-story frame apartment house and office building to cost $25,000.

Apartment House—Architect Earl Morrison prepared plans for a four-story pressed brick apartment house to cost $60,000.

Hotel and Store Building—Cyrus Happy will build two three-story brick store and hotel buildings, to cost $100,000.

Warehouse—Architect Albert Held is preparing plans for a three-story semi-fireproof warehouse for the Shaw-Wells Company, to cost $150,000.

Residence—C. Richardson has plans prepared for a two-story pressed brick $27,000 residence.

WASHINGTON.

High School Building—Vancouver. Architects Stephens & Stephens are preparing plans for a two-story concrete and pressed brick high school building, to cost $100,000.

Business Block—Hoquiam. Contractor Granstrom prepared plans for a two-story concrete building for Herman Winters.

Bank Building—Hoquiam. Architect J. R. McLaughlin prepared plans for a two-story reinforced concrete building for the National Bank.

Masonic Temple—Hoquiam. Architect J. R. McLaughlin prepared plans for a two-story reinforced concrete building for the Masonic Lodge.

Business Block—Wenatchee. T. J. Henry is contemplating the erection of a two-story brick store building, to cost $15,000.

Depot—Hoquiam. The Northern Pacific Railway Company will build a $40,000 brick and concrete building, two stories in height.

School Building—Touchet. Architects Van Dusen & Doughty have been commissioned to prepare plans for a one-story brick building to cost $25,000.

School Building—Hillyard. Architect Sweatt prepared plans for a two-story brick school building, to cost $20,000.

Lodge Building—Pasco. Architects Van Dusen & Doughty prepared plans for a modern two-story brick store and lodge building.

School Building Newport. Architect C. L. Wilson has been commissioned to prepare plans for a $60,000 high school, of brick construction, three stories in height.

Hotel—Oroville. E. N. Grubb is planning the erection of a three-story concrete and pressed brick hotel building, to cost $40,000.

Business Block—Pasco Daniel Page of Pasco is preparing plans for a two-story pressed brick and concrete building, to cost $15,000.

School Building—Montesano. Bonds for $35,000 were voted with which to erect a brick high school building.

Business Block—Toppenish. J. D. Keck will erect a three-story brick store building, to cost about $25,000.

Office Building—Aberdeen. Architect C. E. Trontman is preparing plans for a two-story reinforced concrete building for J. D. Crary, to cost $70,000.

School Building—Kosmos. A two-story brick school building, to cost $15,000, will be erected in this city.

Salvation Army Bulding—Centralia. The Salvation Army is planning to erect a modern two-story brick building, to cost $10,000.

IDAHO.

High School—Moscow. Architect C. Z. Hubbell, of Spokane, prepared plans for a two-story pressed brick high school building, to cost $65,000.

School Building—Hollister. Architect D. E. Morse, of Twin Falls, prepared plans for a two-story brick high school building, to cost $30,000.

High School—St. Anthony. A $50,000 bond issue was voted by this district for the erection of a brick high school.

School Building—Kellogg. Bonds for $25,000 were voted for the erection of a high school building.

Depot—Pocatello. The Oregon Short Line is contemplating the erection of a pressed brick depot building, to cost $400,000.

School Building—Genesee. Architect C. J. Hubbell of Spokane prepared plans for a $300,000 high school building.

School Building—Nezperce. Architect J. H. Nave, of Lewiston, prepared plans for a three-story brick school building, to cost $45,000.

BRITISH COLUMBIA.

Business Block—New Westminster. E. B. Wetenhall prepared plans for a three-story brick store and apartment house, to cost $50,000.

Warehouse—Vancouver. Wood, Ballance & Leggett will build a six-story brick warehouse at a cost of $85,000.

Office Building—Vancouver. F. W. Padmore will erect a six-story reinforced concrete building, at a cost of $50,000.

Apartments—Vancouver. Architect W. T. Whiteway is preparing plans for a six-story modern brick apartment building, to cost $100,000.

Garages—Vancouver. Architect W. T. Whiteway prepared plans for two concrete garages, to cost $35,000.

Store and Apartments—Vancouver W. L. Tait will erect a five-story brick building, to cost $20,000, to be utilized for stores and apartments.

Sub-station—Vancouver. The British Columbia Electric Railway Company will erect a heavy reinforced concrete sub-station, at a cost of $100,000.

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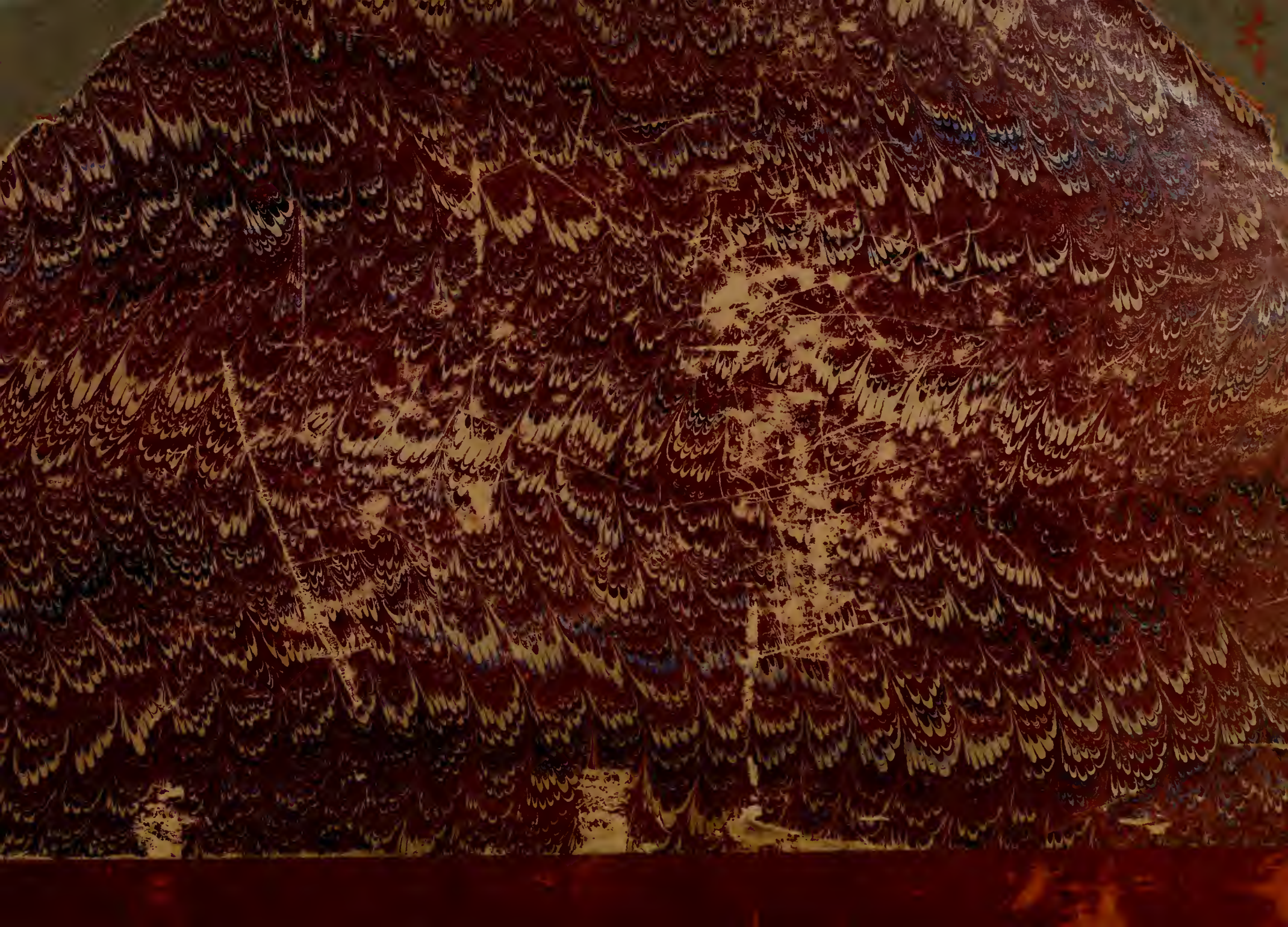
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